

104 / 246

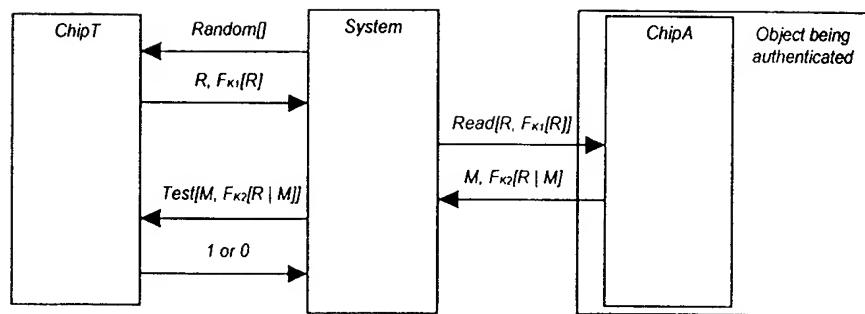


FIG. 171

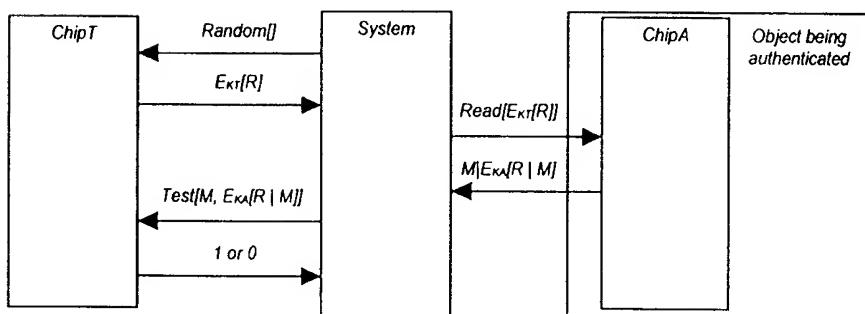


FIG. 172

105 / 246

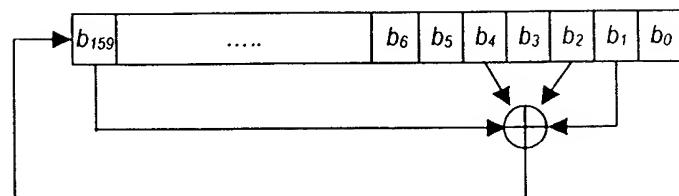


FIG. 173

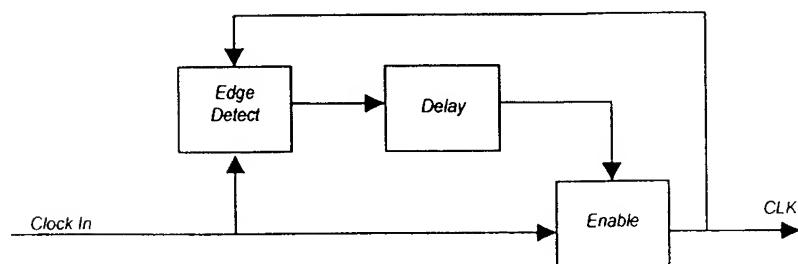


FIG. 174

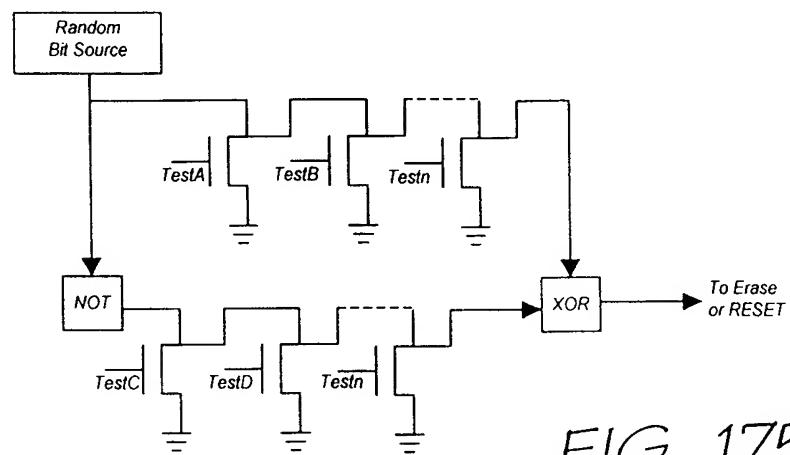


FIG. 175

106 / 246

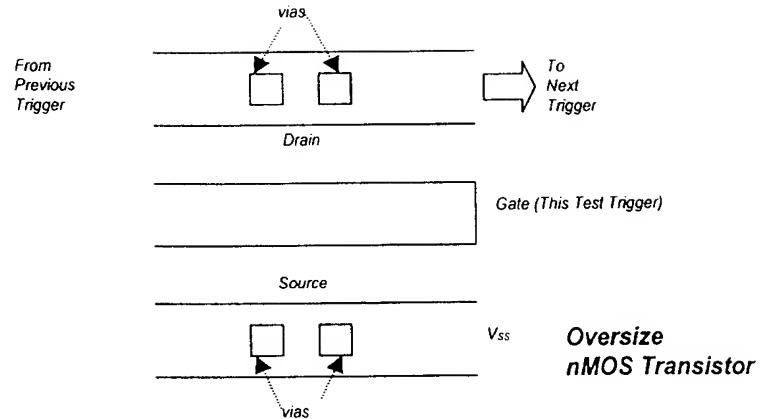


FIG. 176

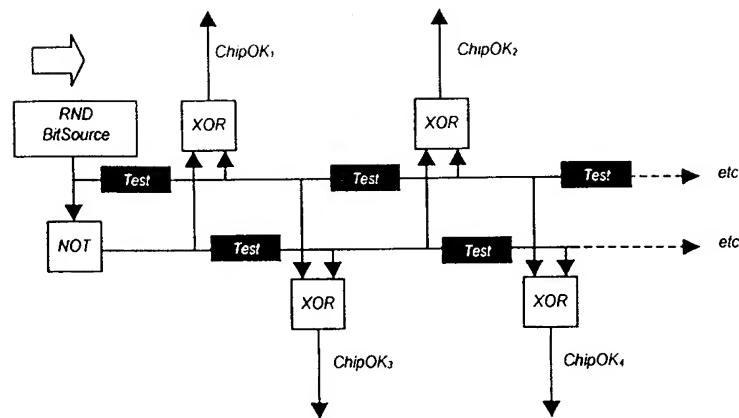


FIG. 177

107 / 246

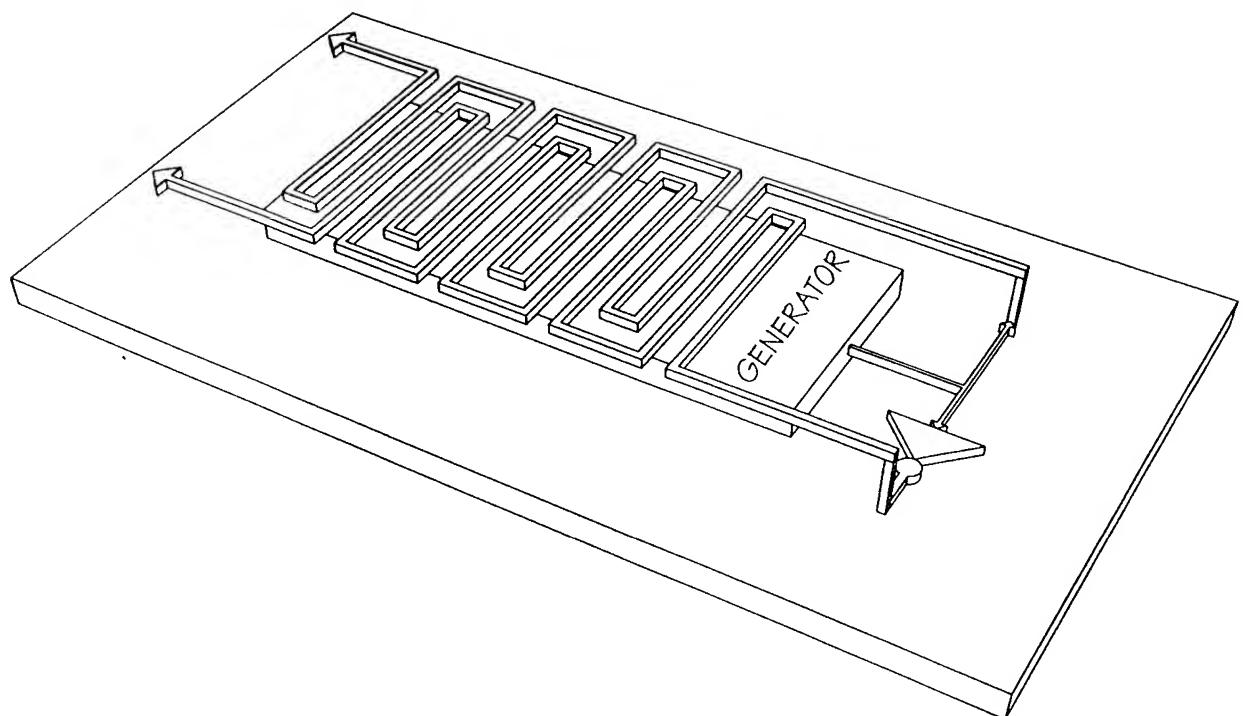


FIG. 178

108 / 246

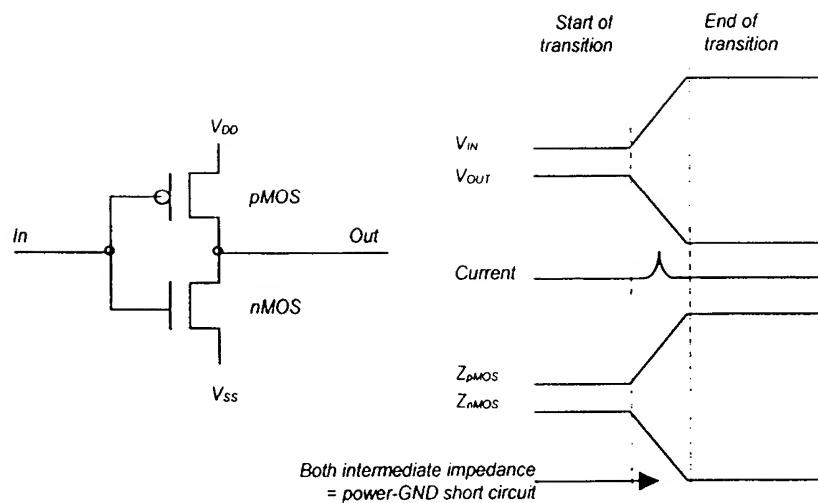


FIG. 179

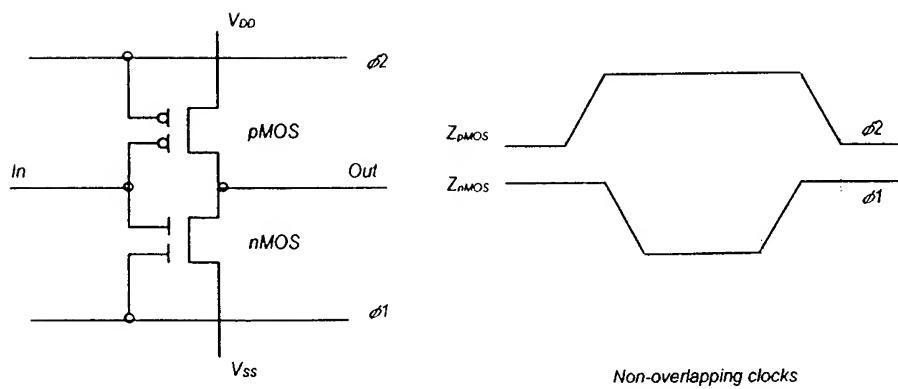


FIG. 180

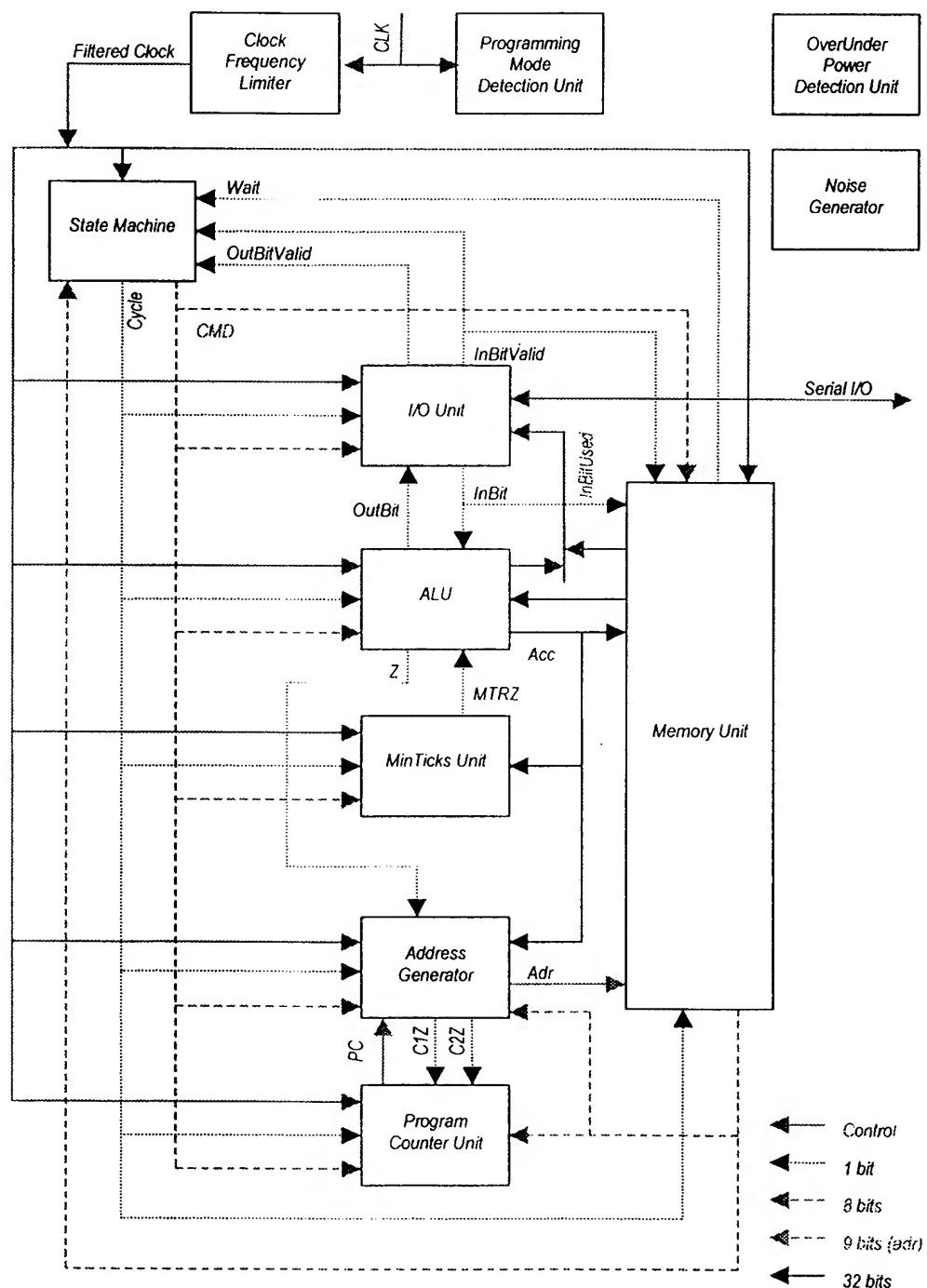


FIG. 181

110 / 246

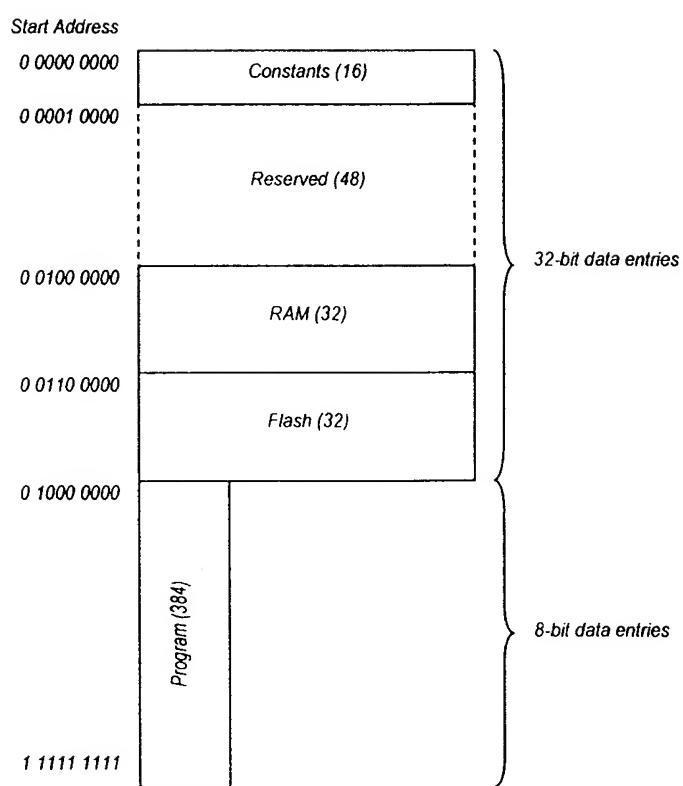


FIG. 182

111 / 246

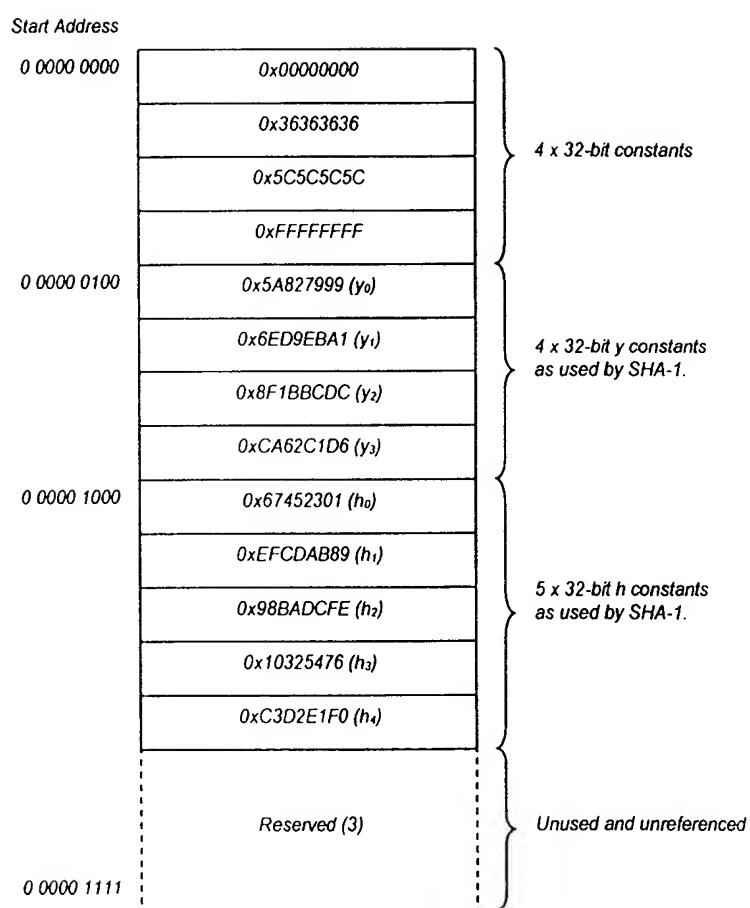


FIG. 183

112 / 246

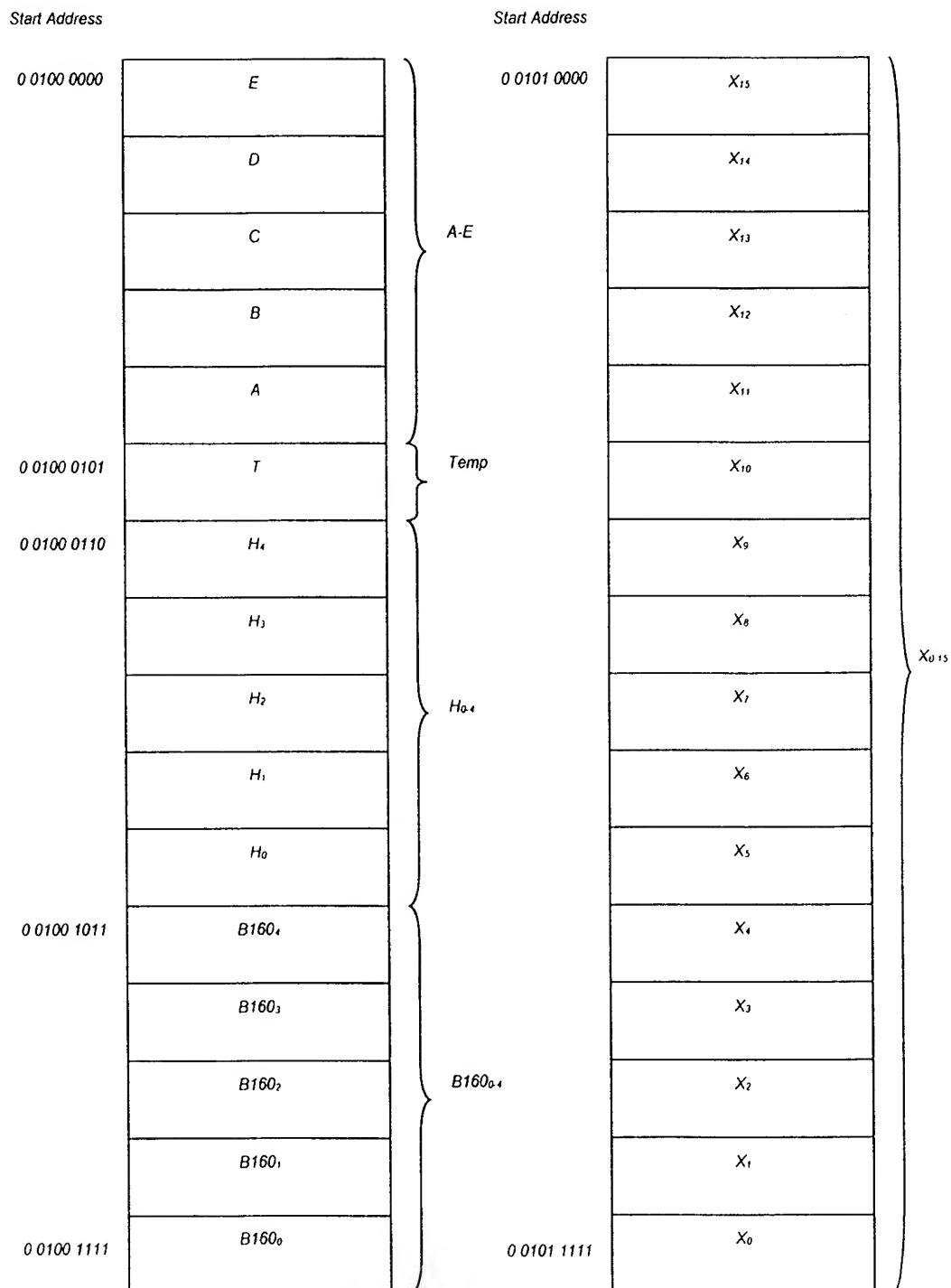


FIG. 184

113 / 246

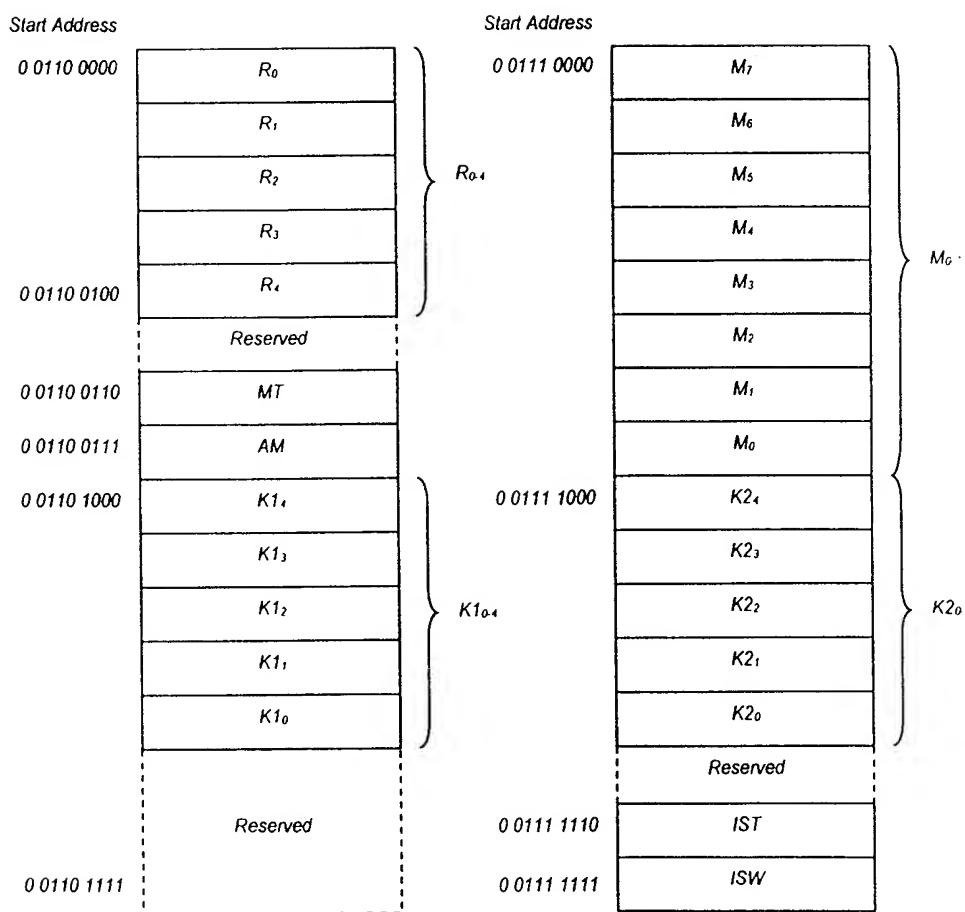


FIG. 185

114 / 246

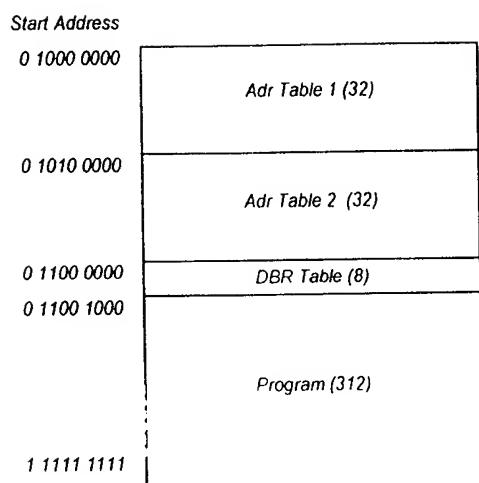


FIG. 186

115 / 246

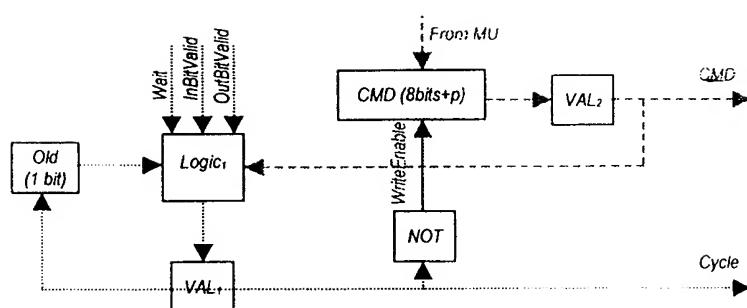


FIG. 187

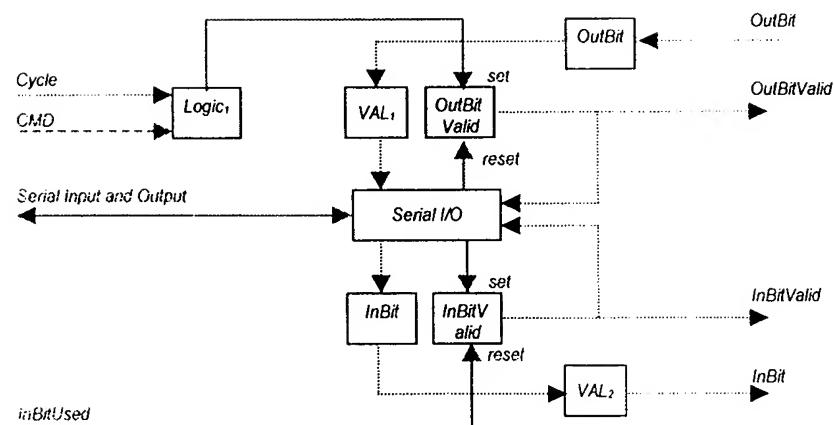


FIG. 188

116 / 246

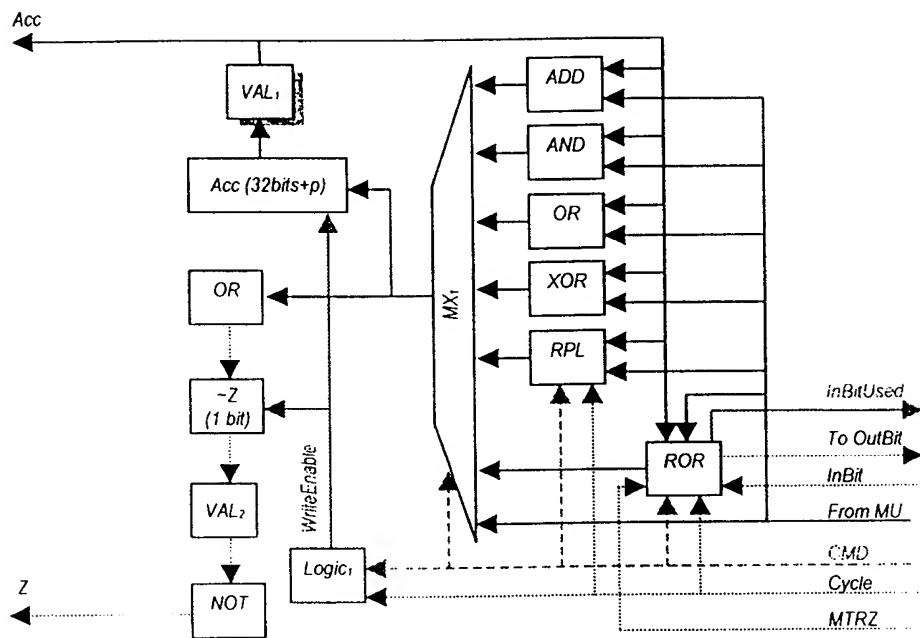


FIG. 189

117 / 246

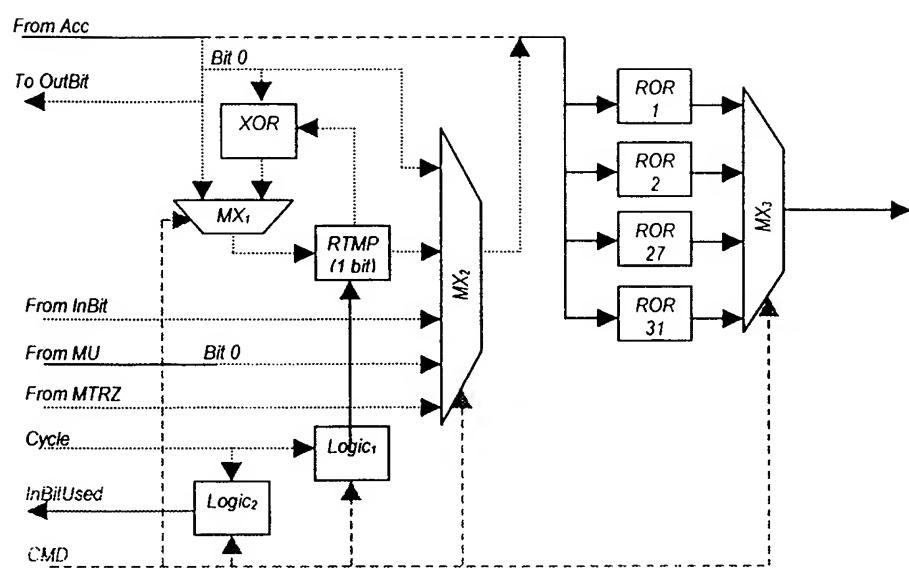


FIG. 190

118 / 246

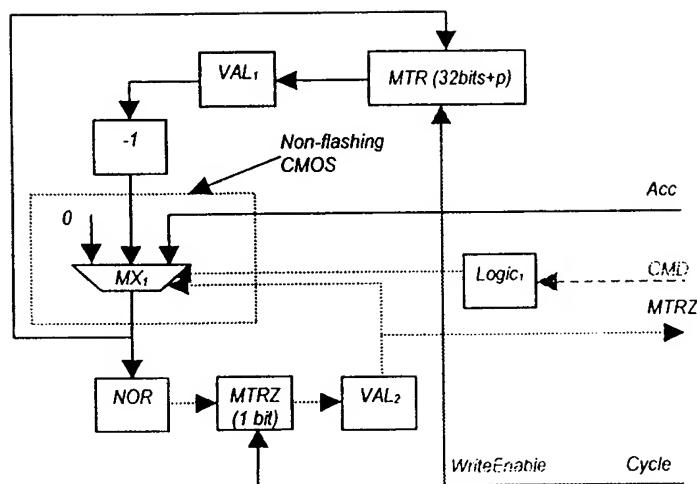


FIG. 191

119 / 246

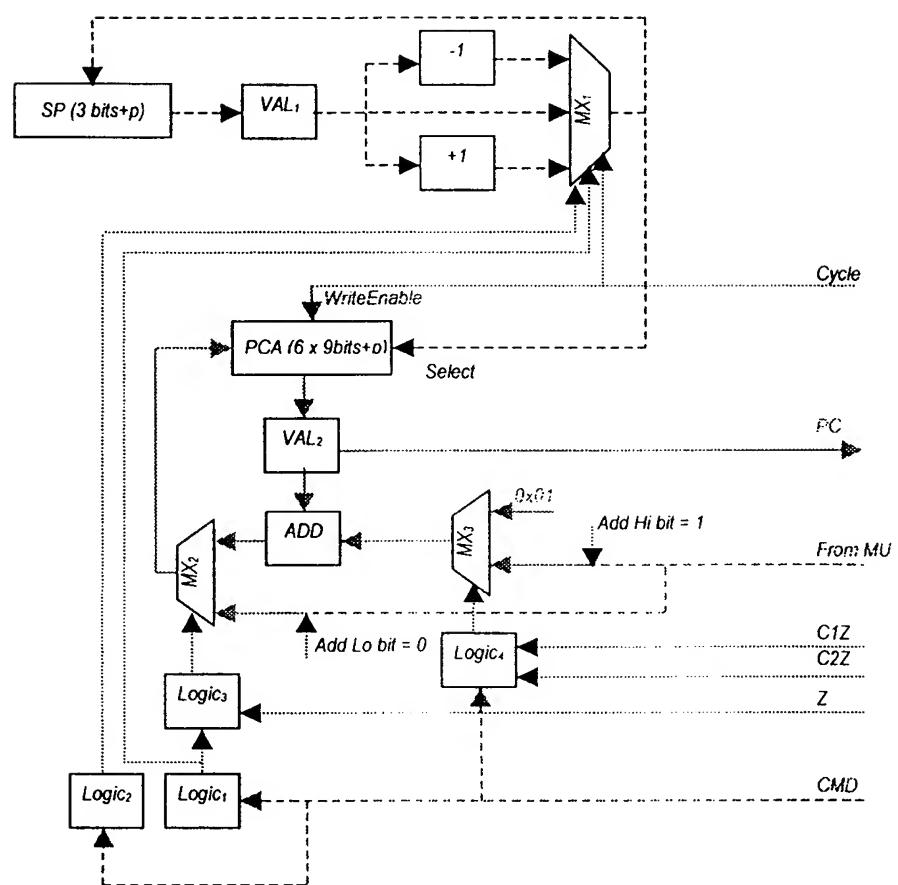


FIG. 192

120 / 246

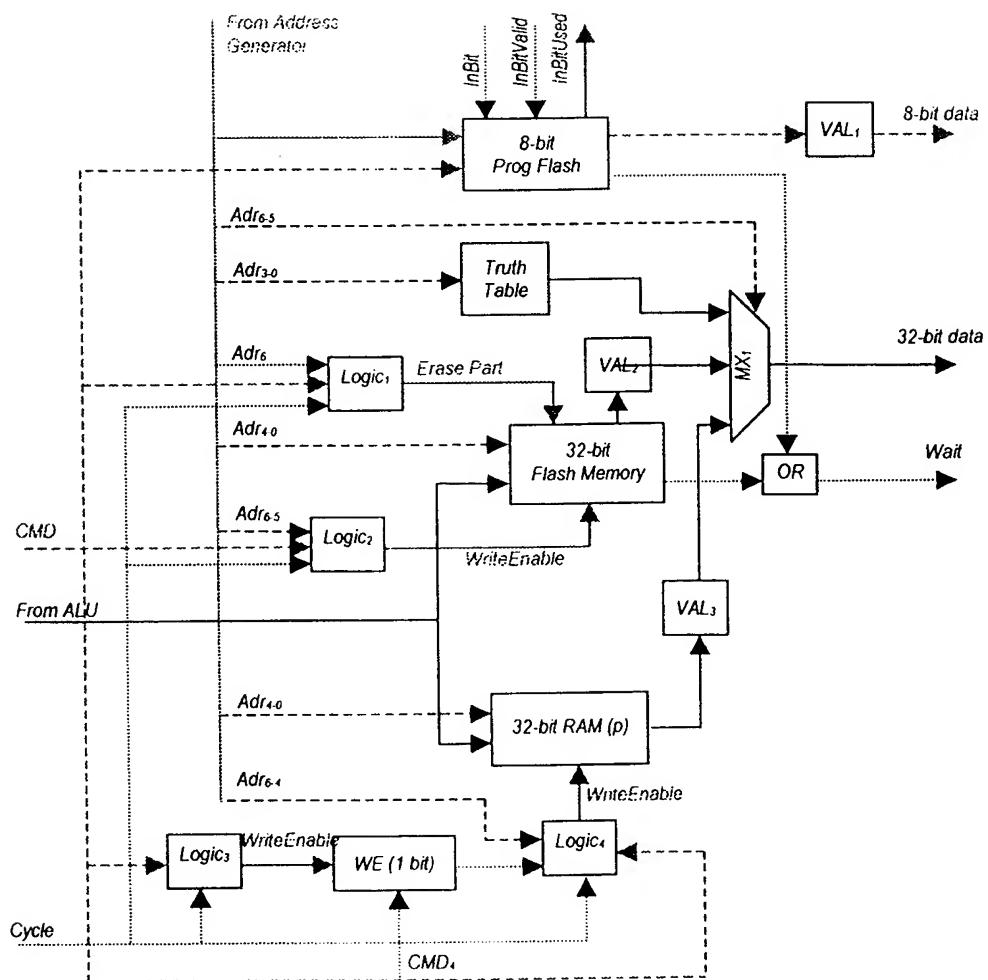


FIG. 193

121 / 246

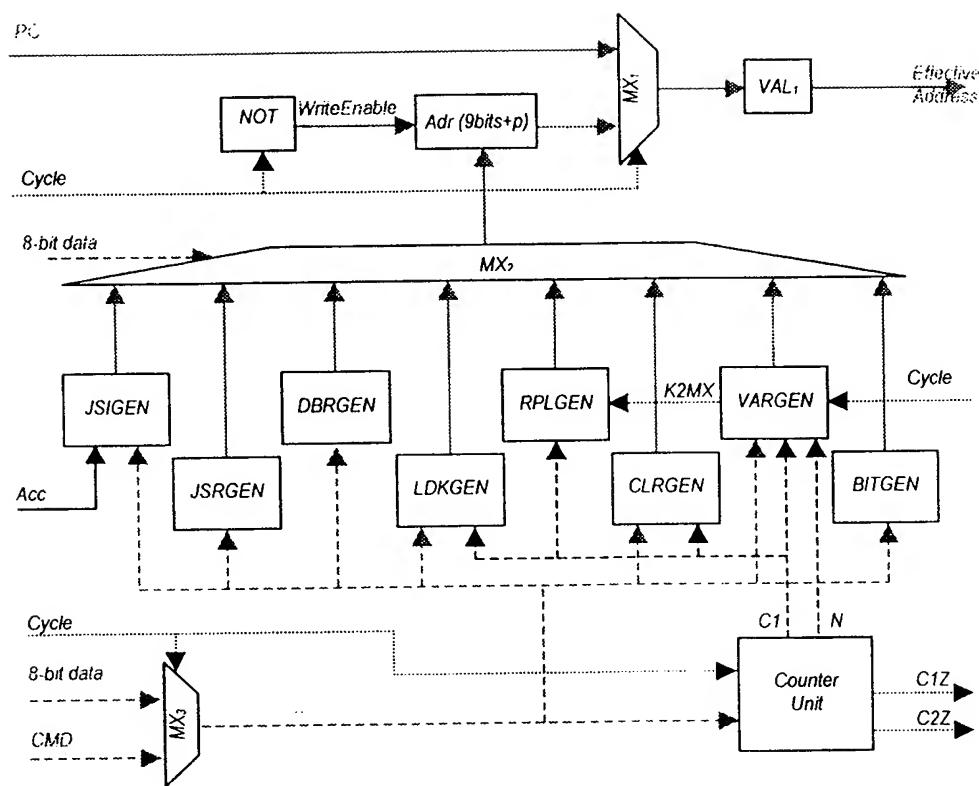
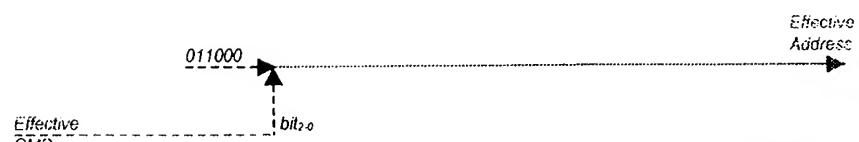
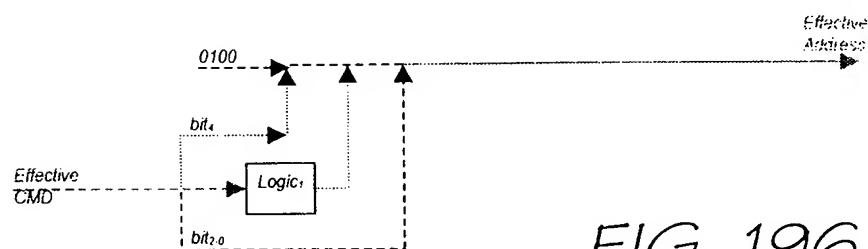
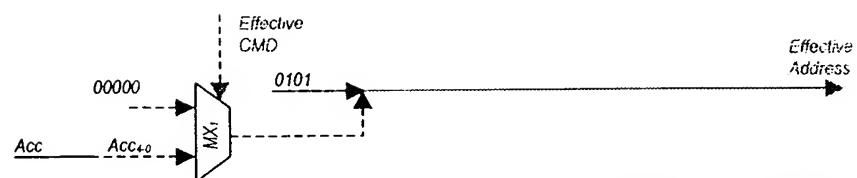


FIG. 194

122 / 246



123 / 246

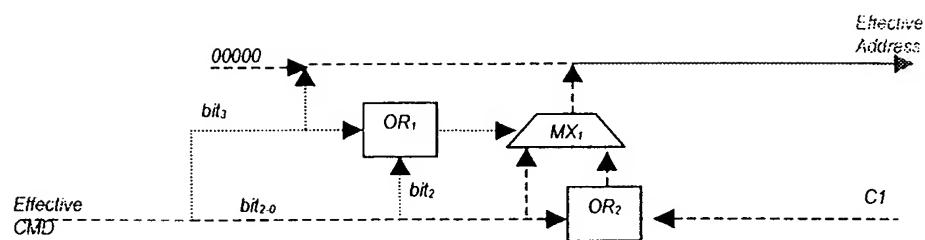


FIG. 198

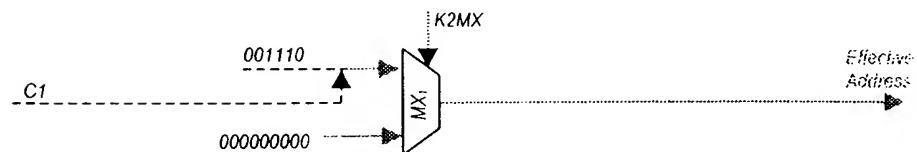


FIG. 199

124 / 246

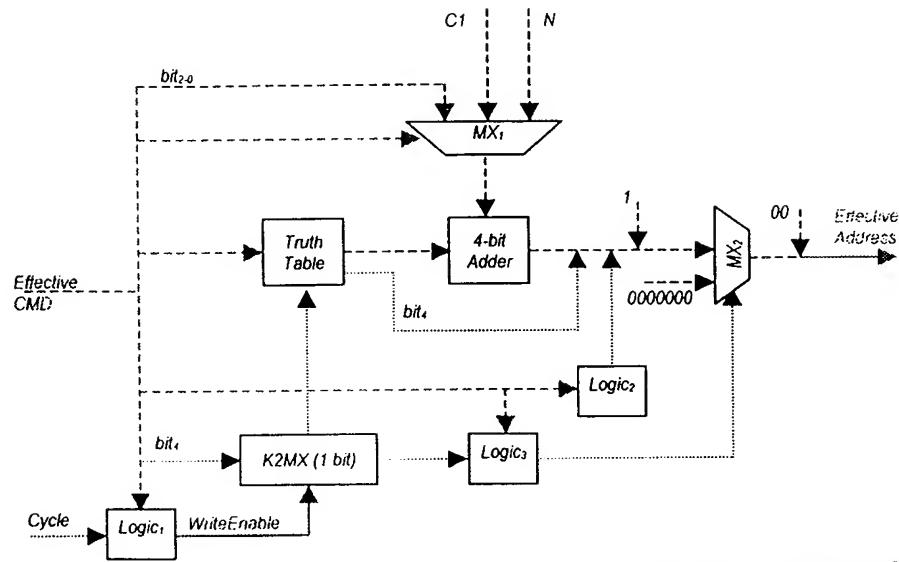


FIG. 200

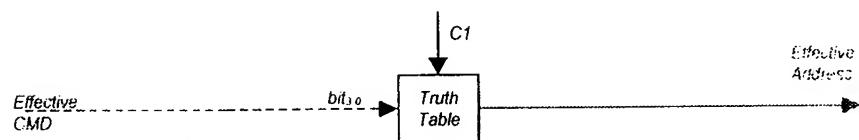


FIG. 201

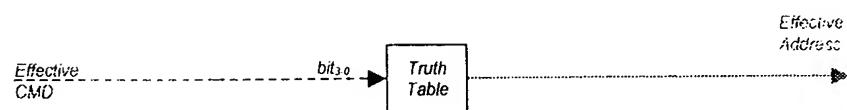


FIG. 202

125 / 246

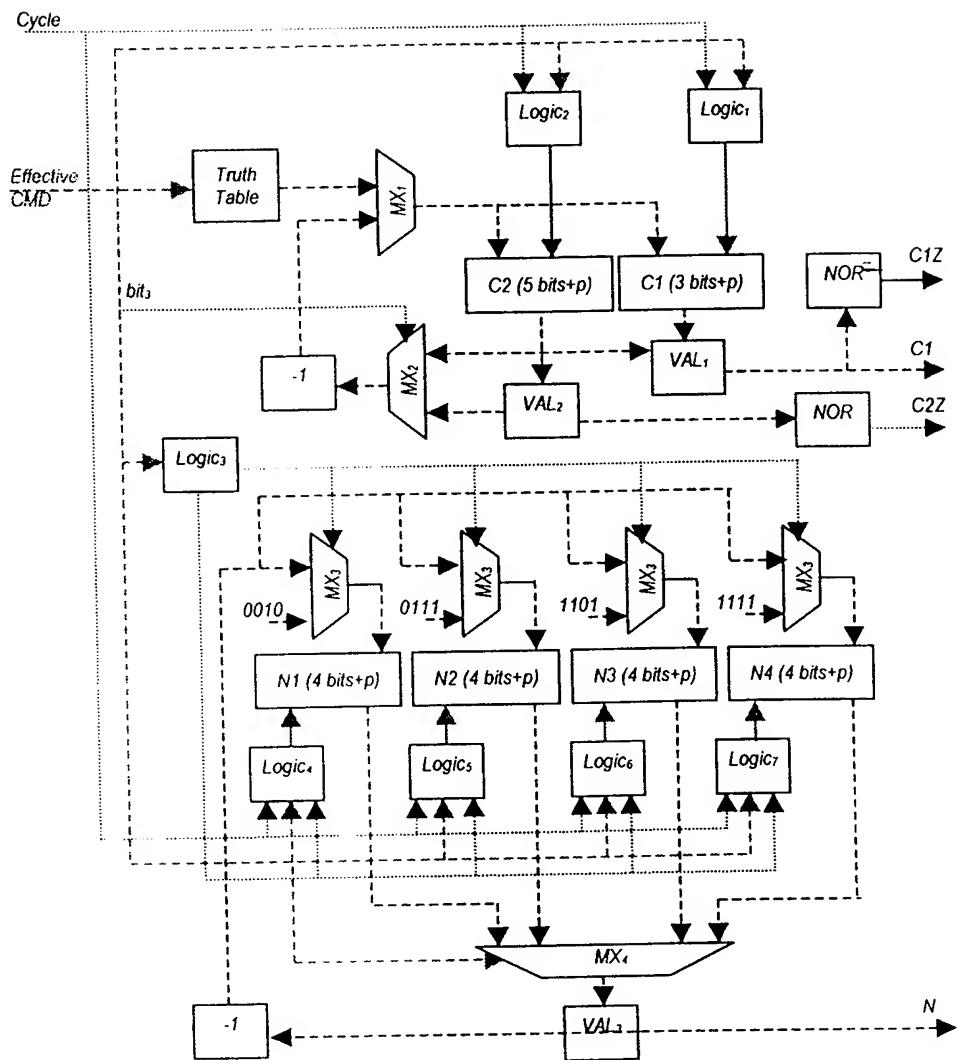


FIG. 203

126 / 246

705

Data Type	Bits
Factory code	16
Batch number	32
Serial number	48
Manufacturing date	16
Media length	24
Media type	8
Preprinted media length	16
Cyan ink viscosity	8
Magenta ink viscosity	8
Yellow ink viscosity	8
Cyan drop volume	8
Magenta drop volume	8
Yellow drop volume	8
Cyan ink color	24
Magenta ink color	24
Yellow ink color	24
Remaining-media length indicator	16
Authentication key	128
Copyrightable bit pattern	512
Reserved for camera use	88
Total	1024

728

FIG. 204

127 / 246

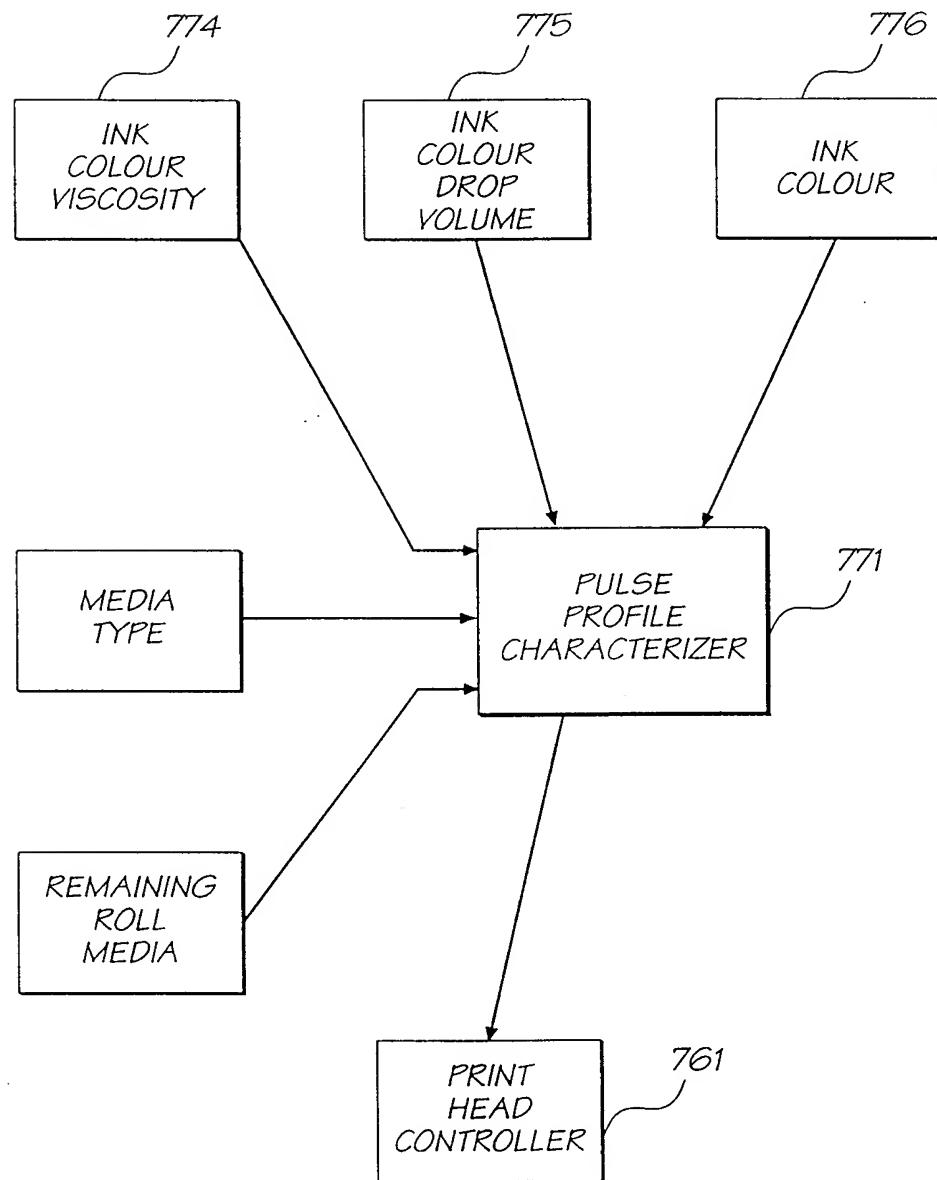


FIG. 205

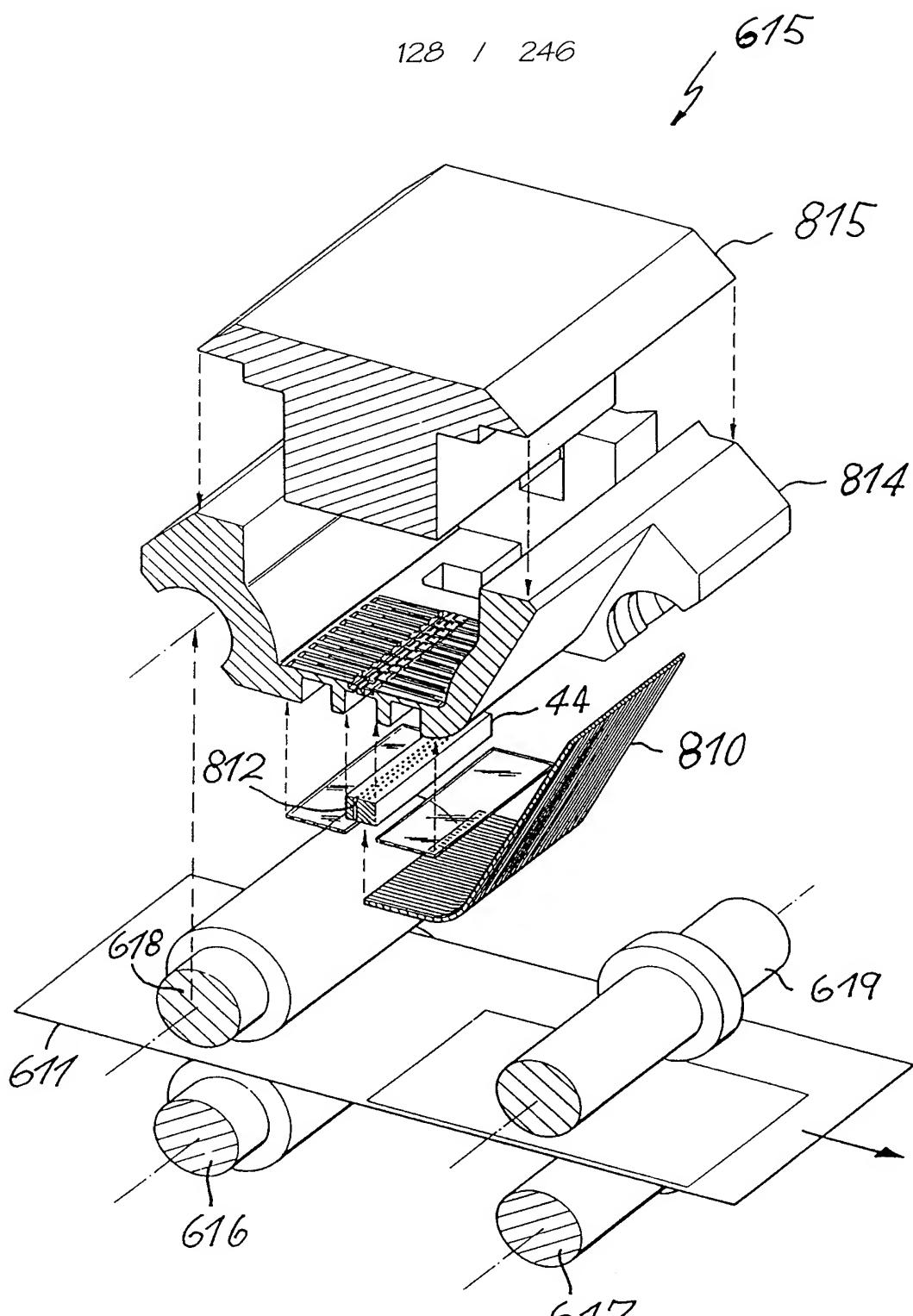


FIG 206

129 / 246

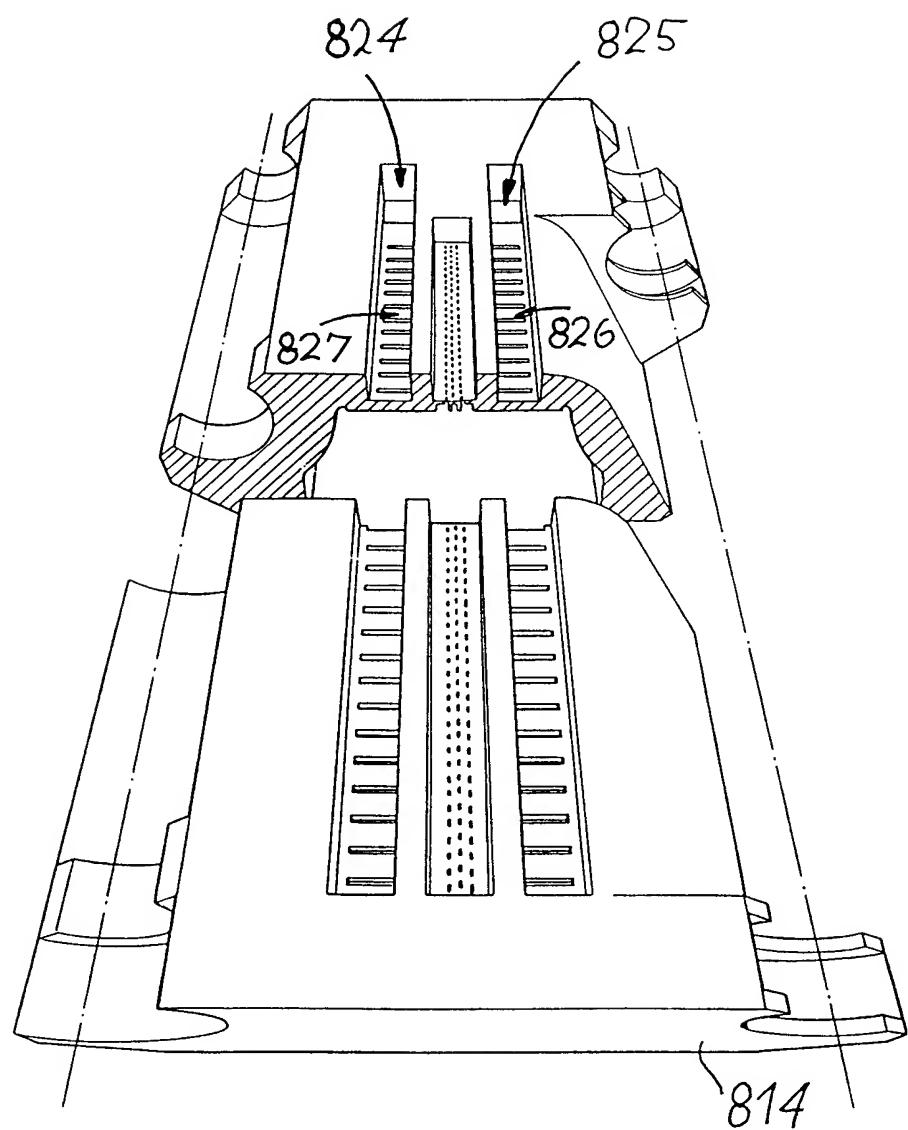


FIG. 207

130 / 246

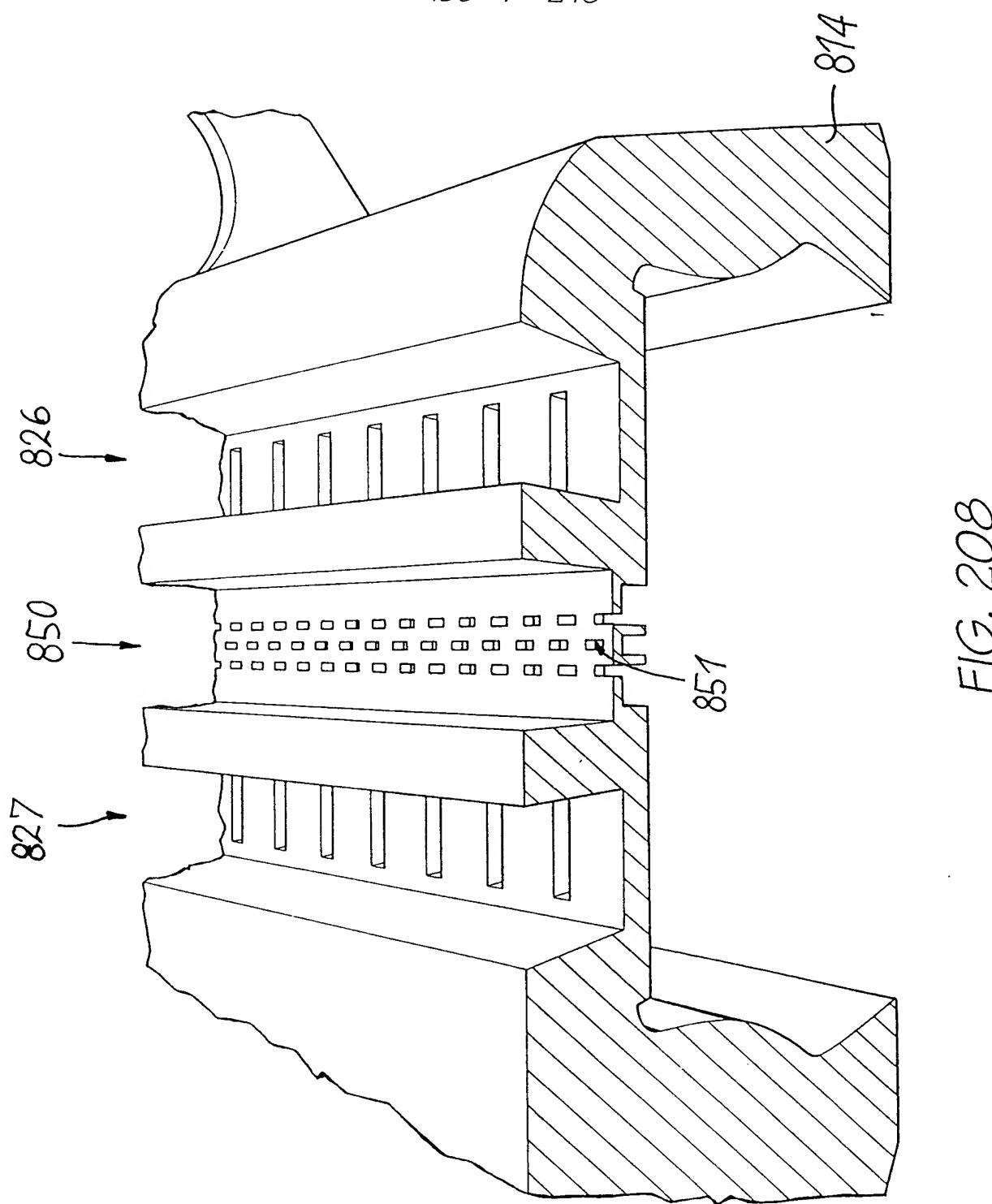


FIG. 208

131 / 246

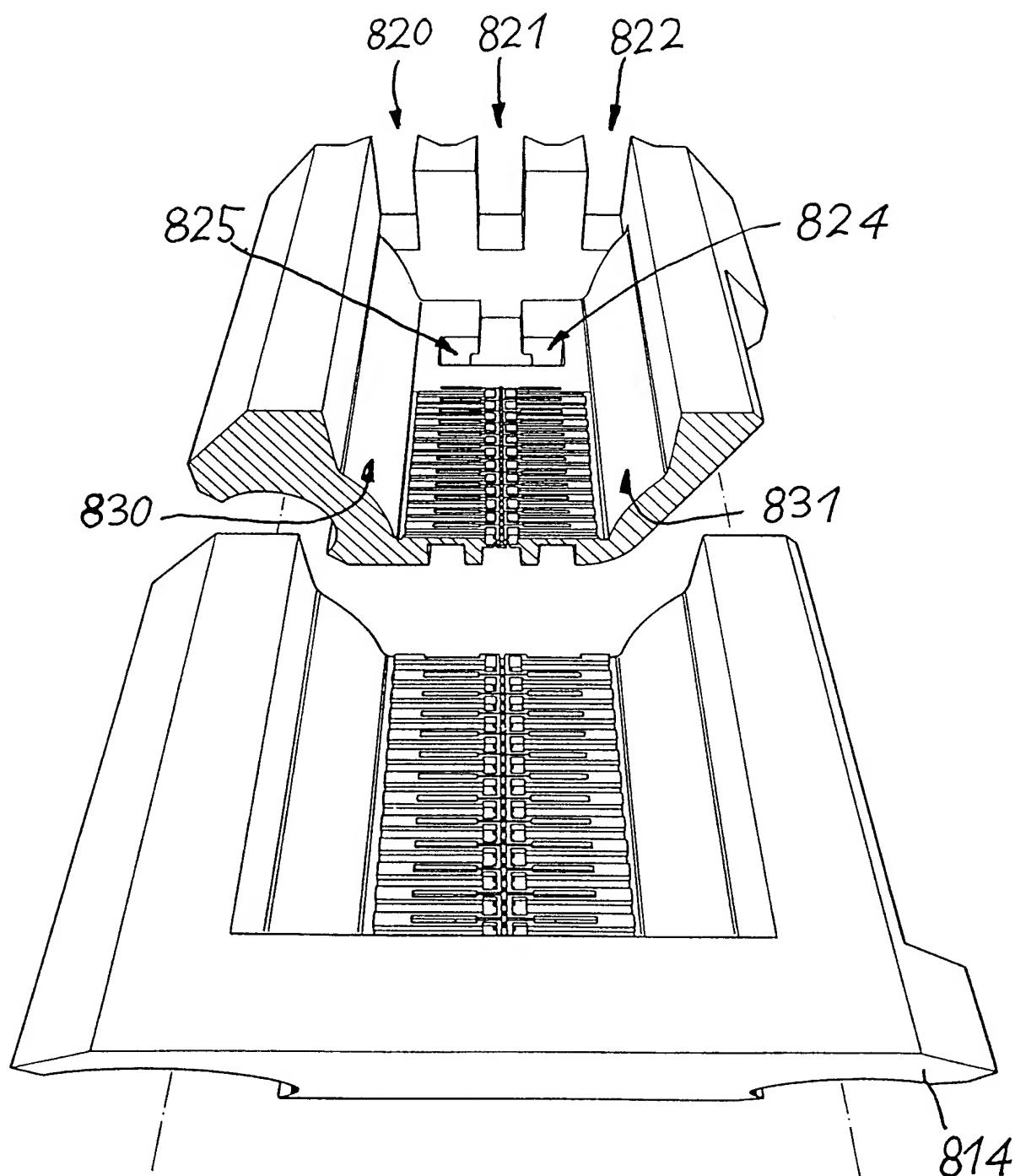


FIG. 209

132 / 246

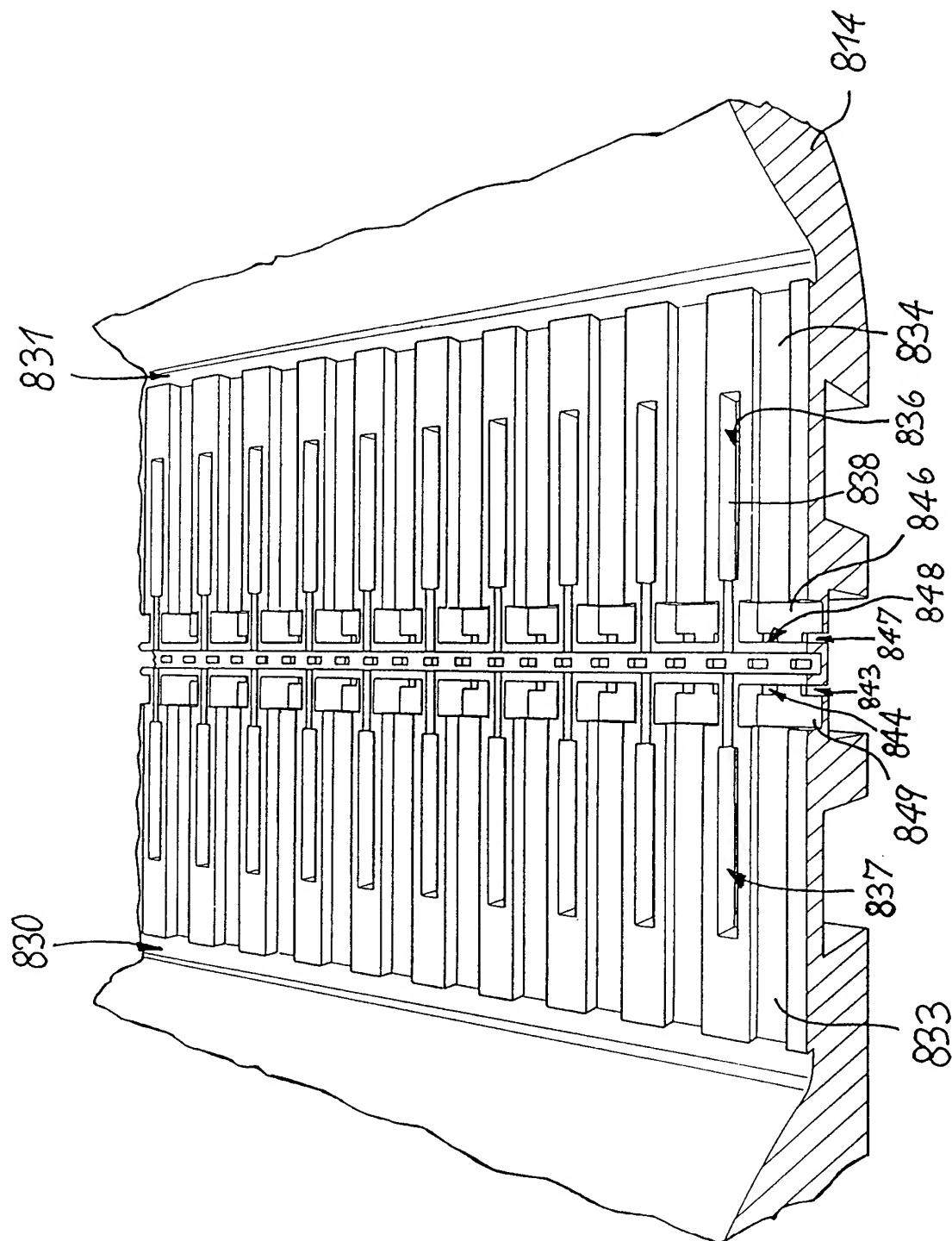


FIG. 210

133 / 246

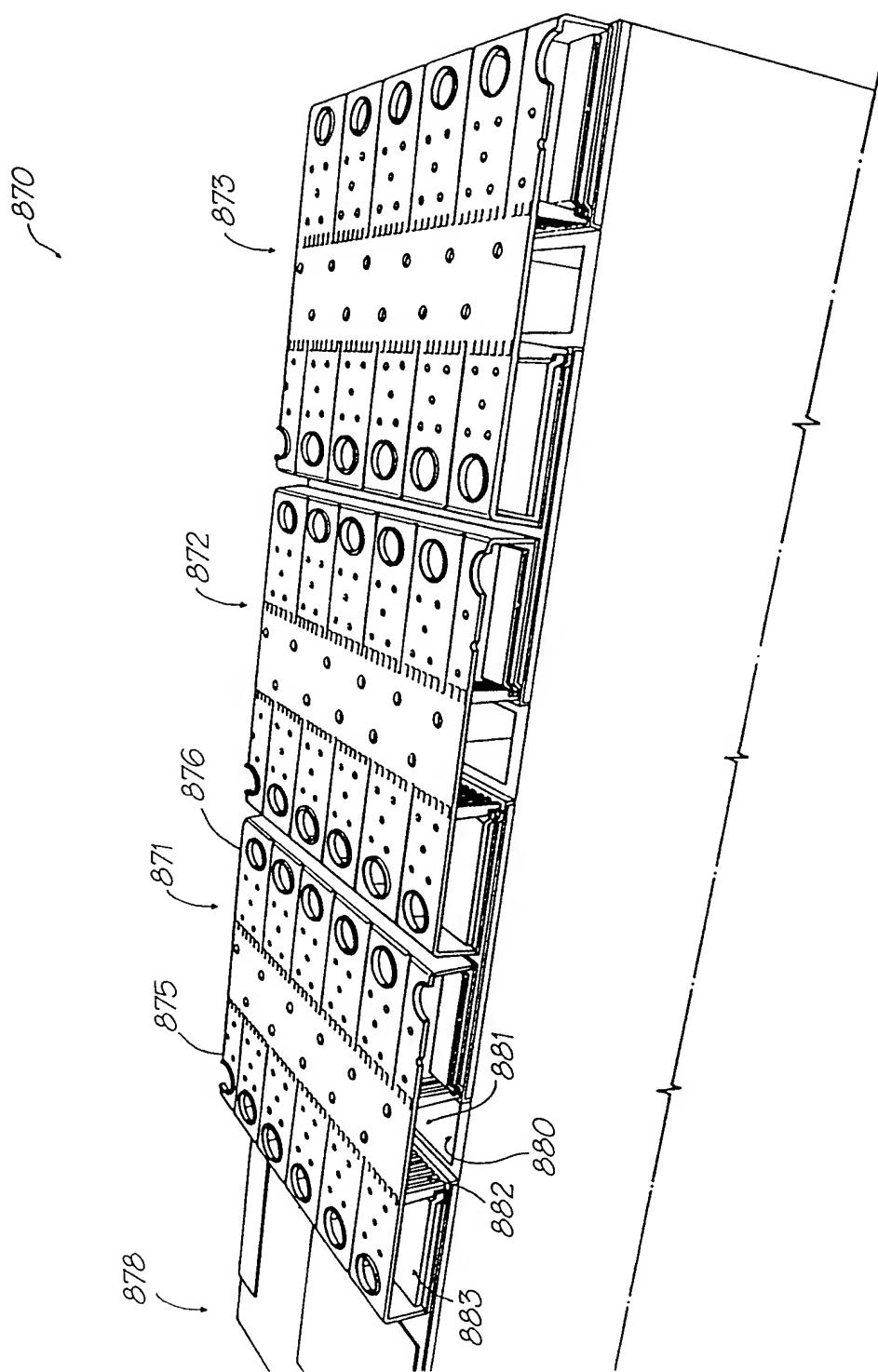
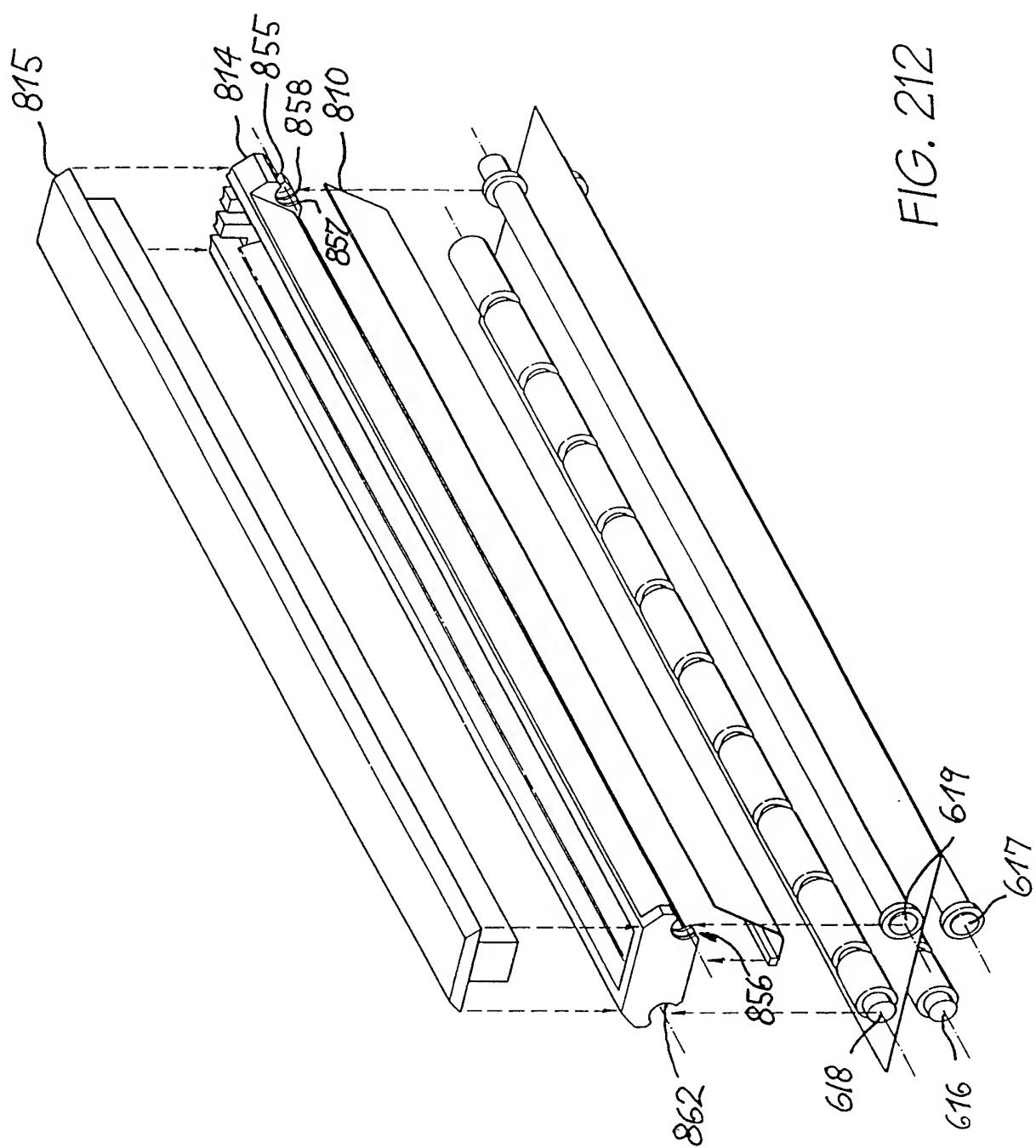
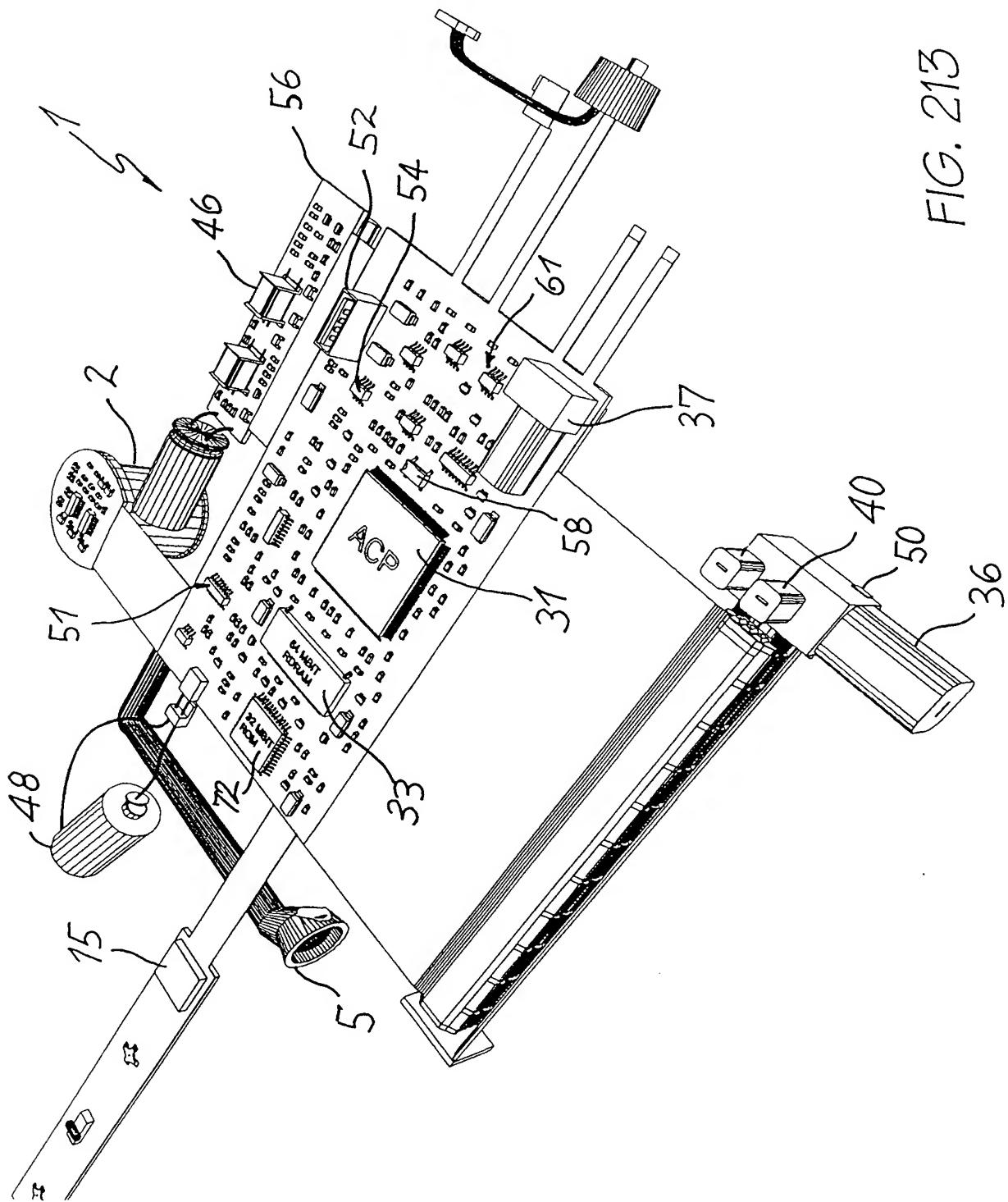


FIG. 211

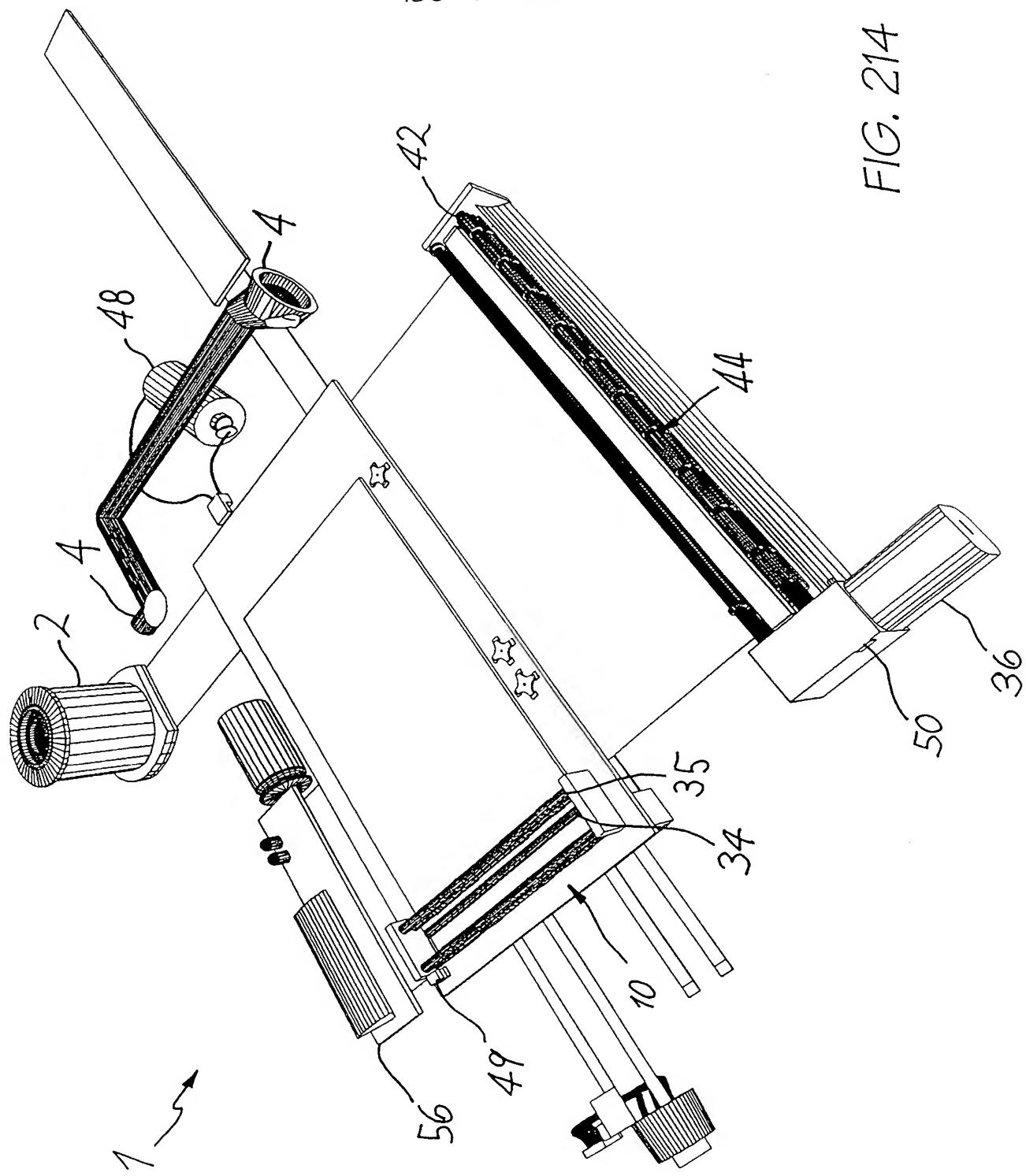


135 / 246



136 / 246

FIG. 214



137 / 246

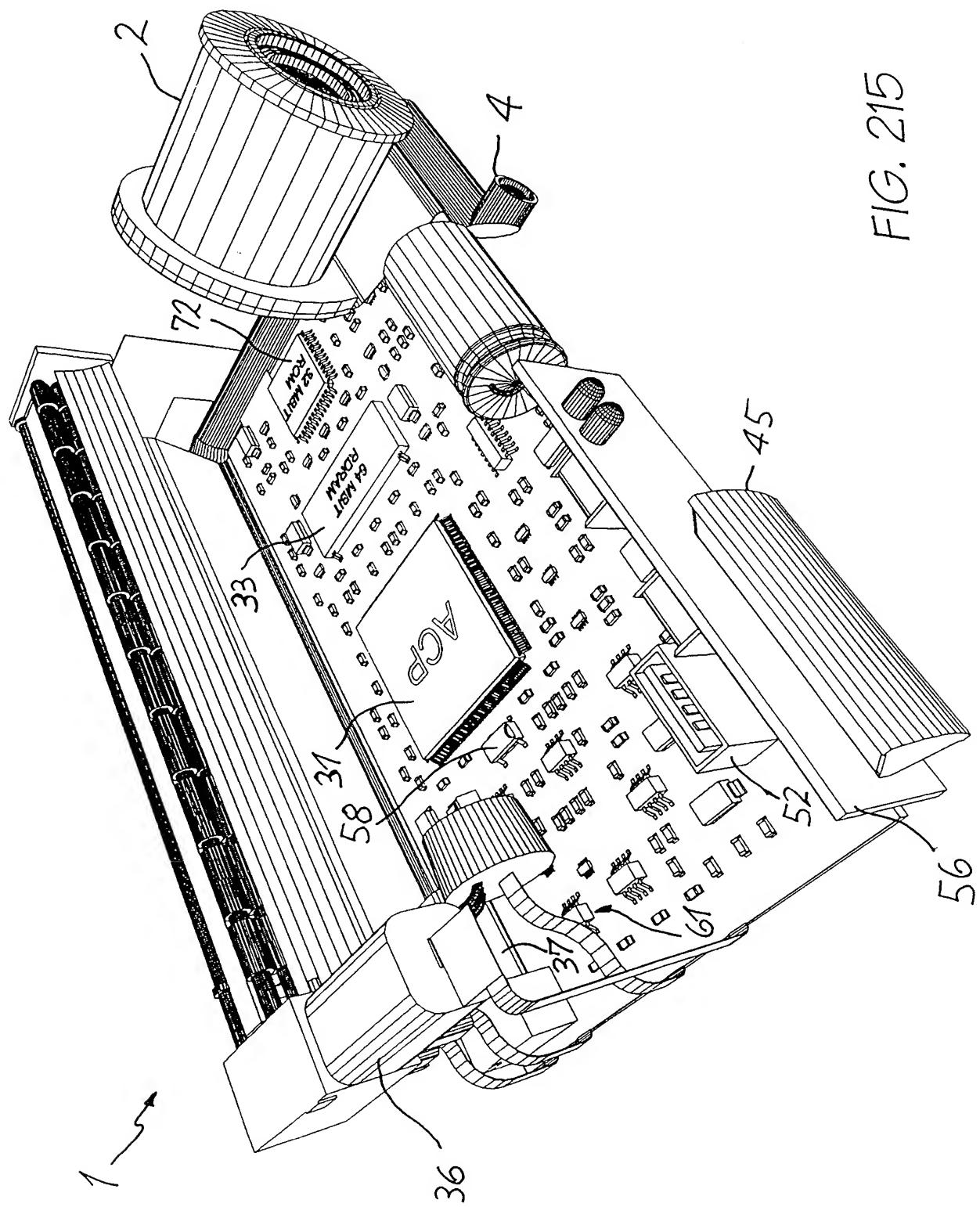
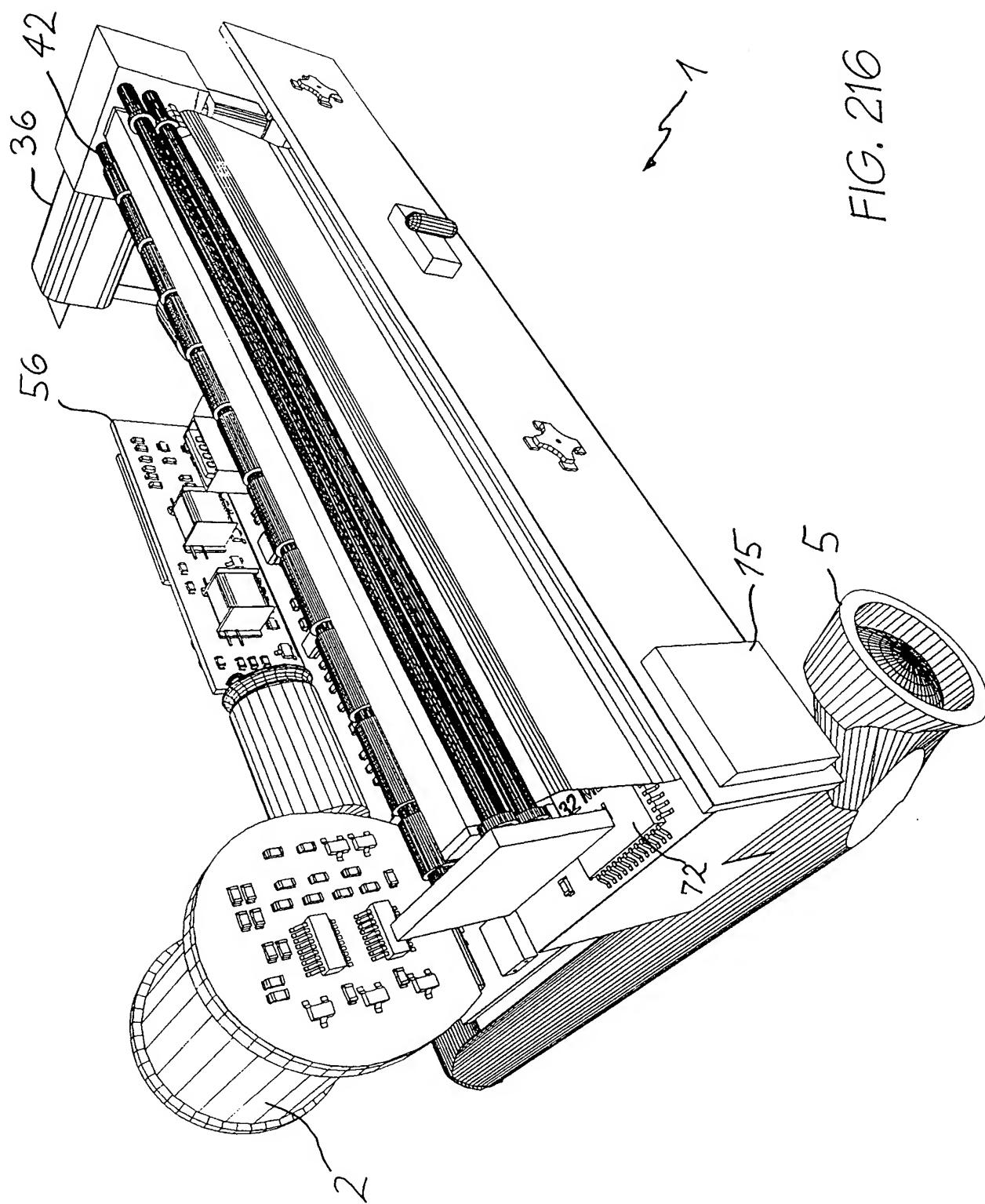


FIG. 215

138 / 246



139 / 246

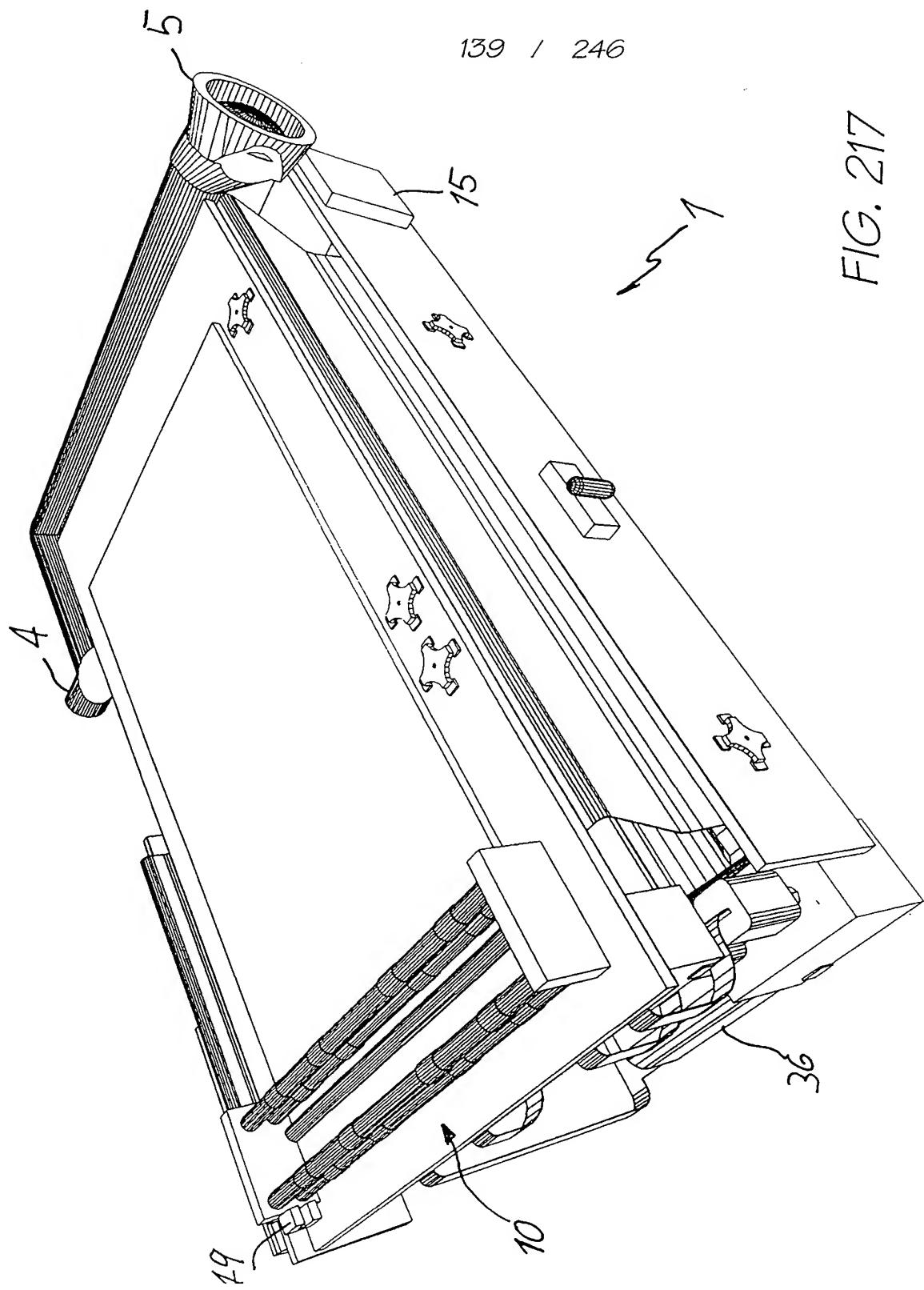


FIG. 217

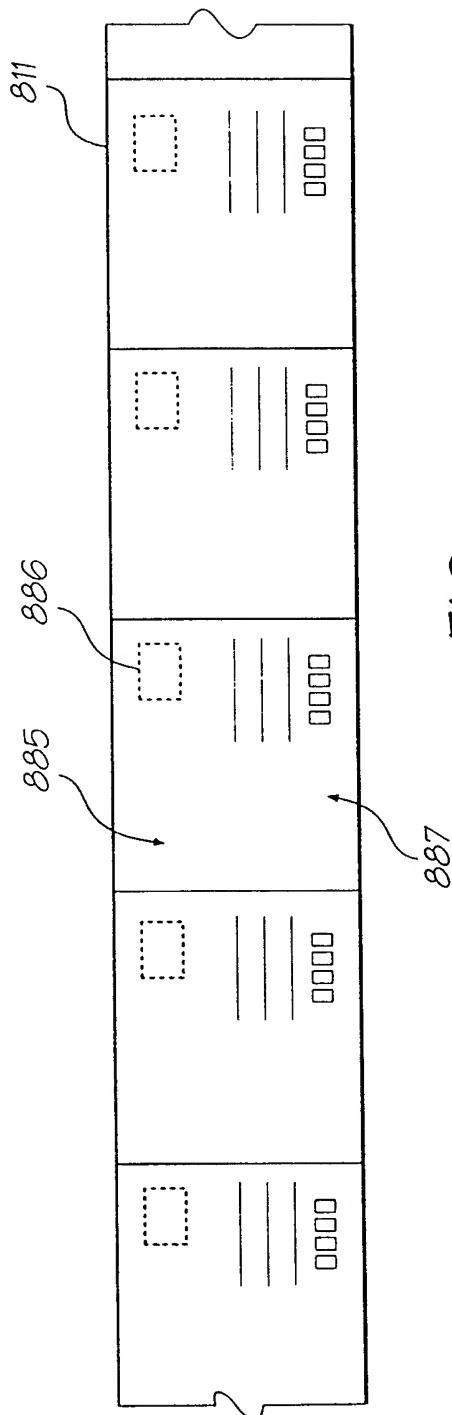


FIG. 218

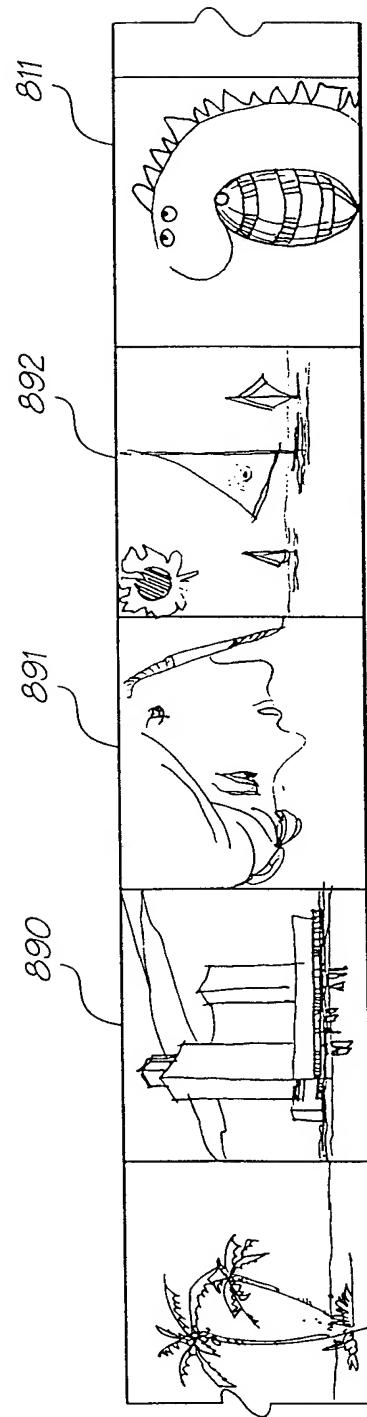


FIG. 219

141 / 246

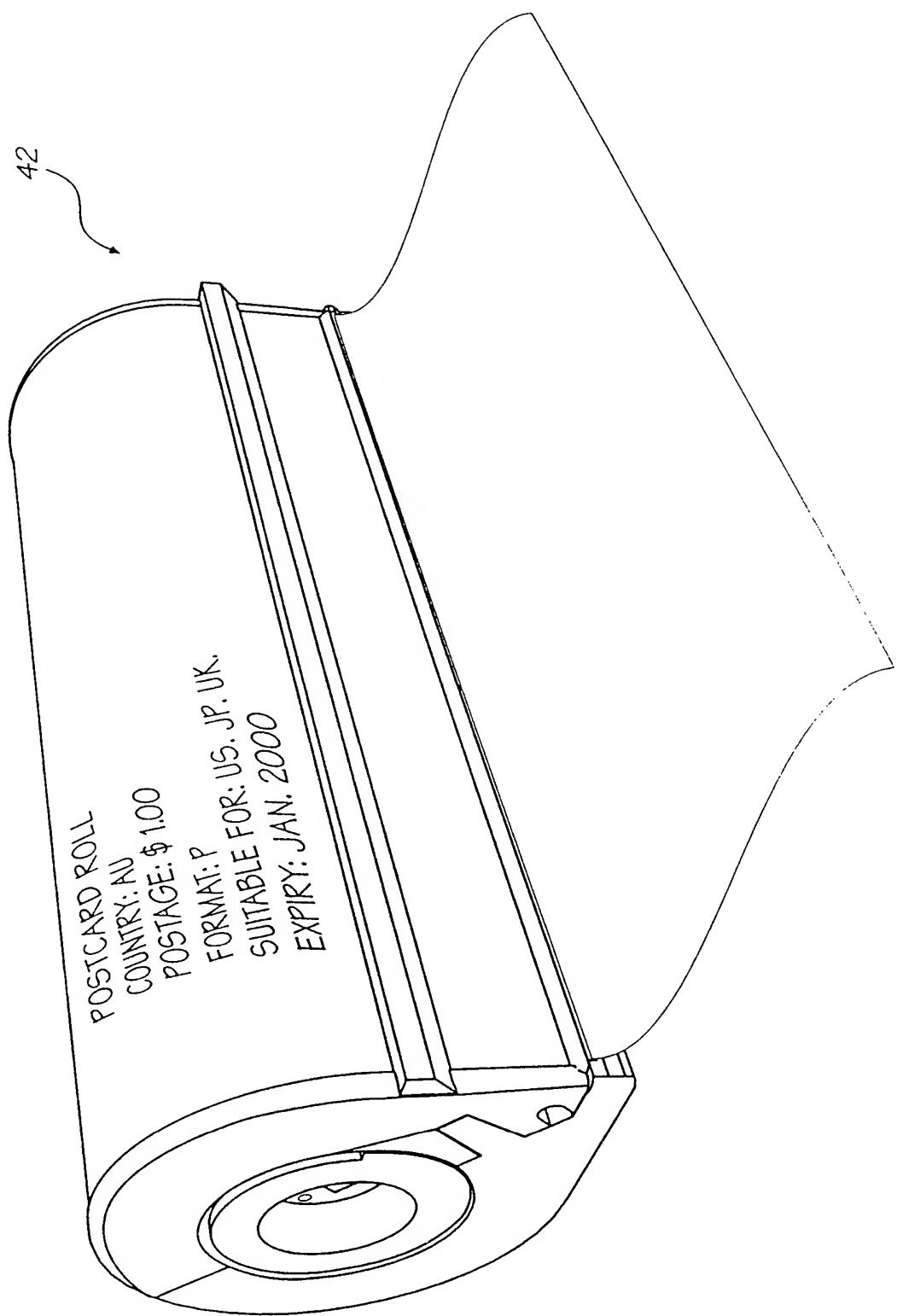


FIG. 220

142 / 246

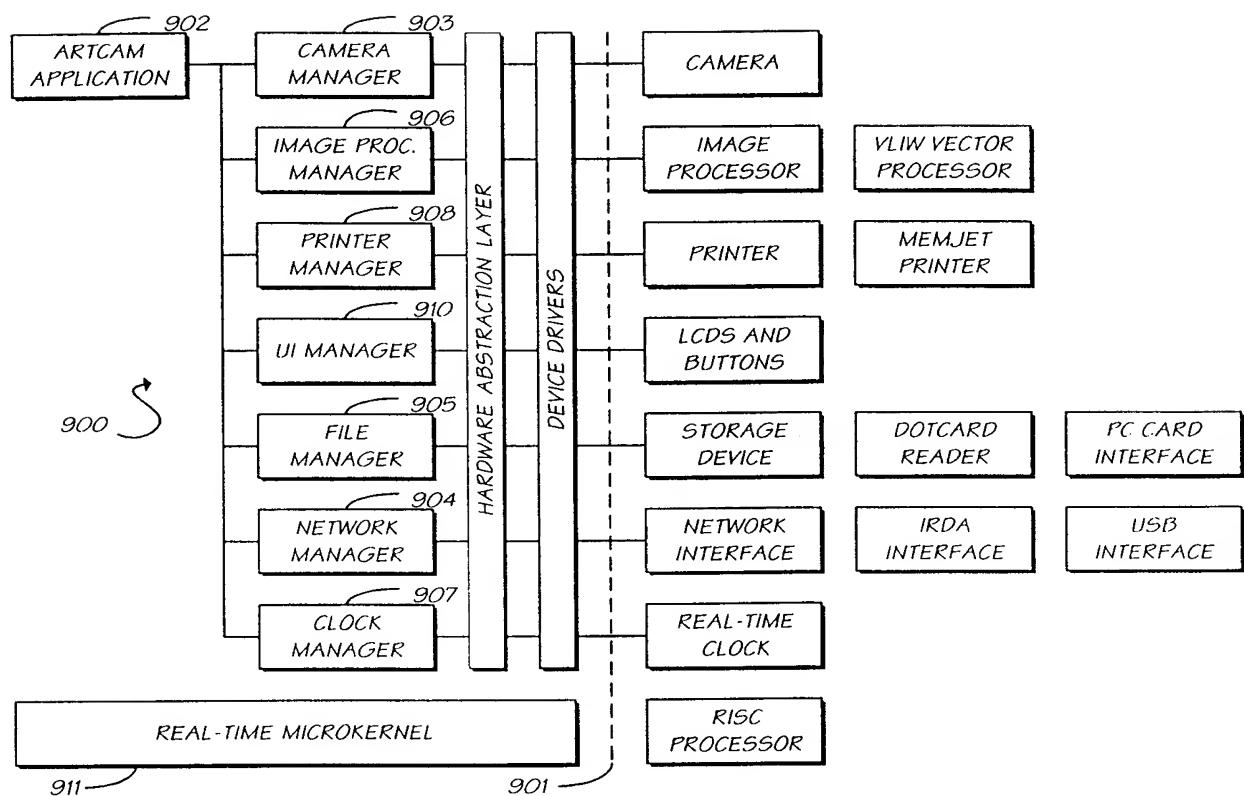
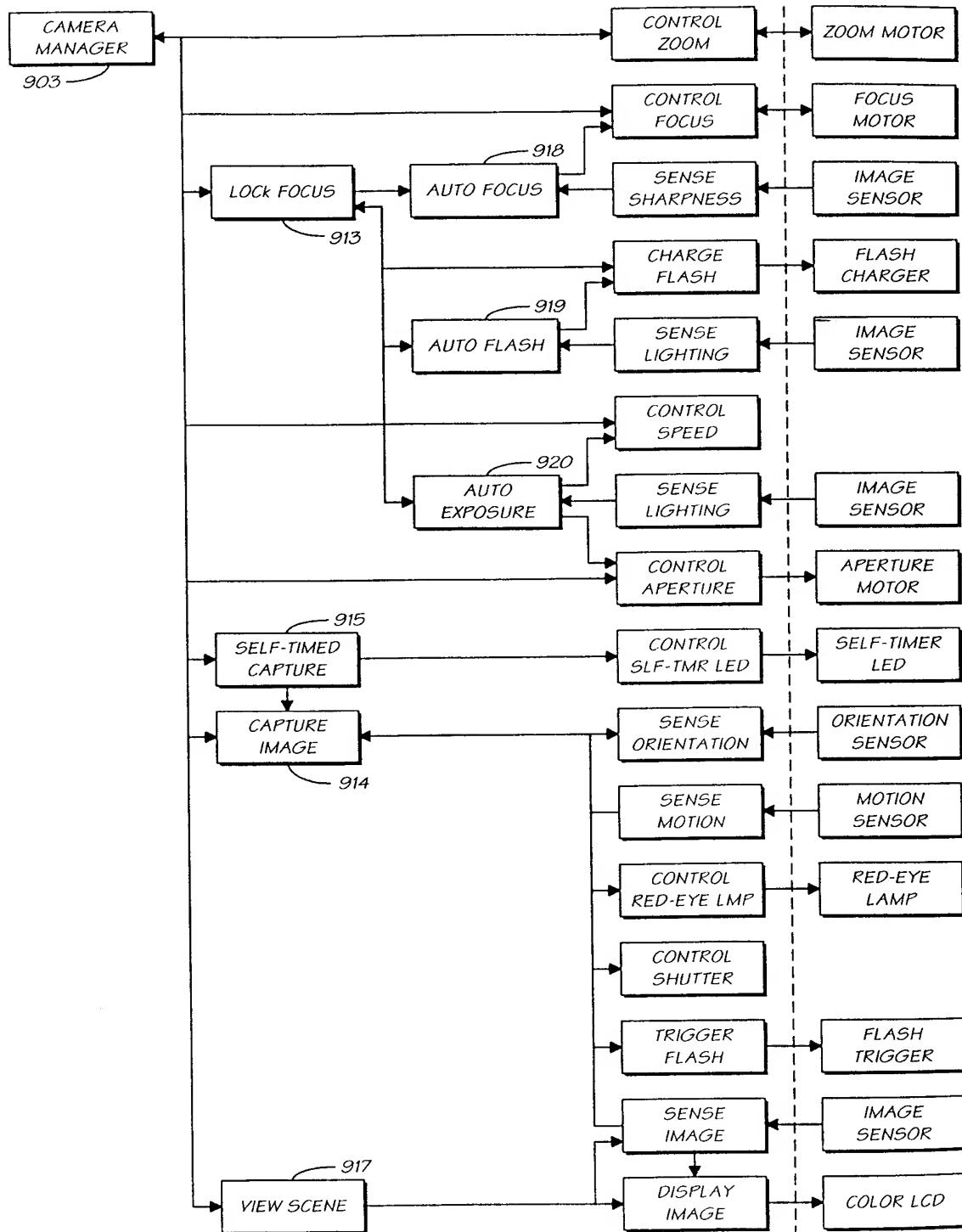


FIG. 221

143 / 246



144 / 246

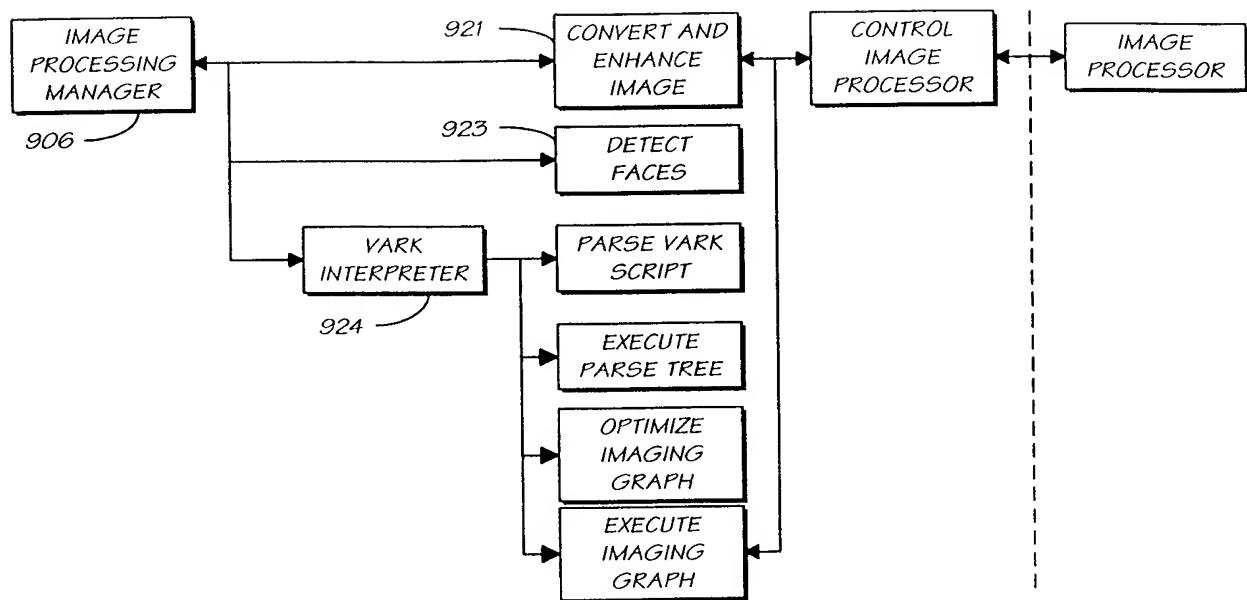


FIG. 223

145 / 246

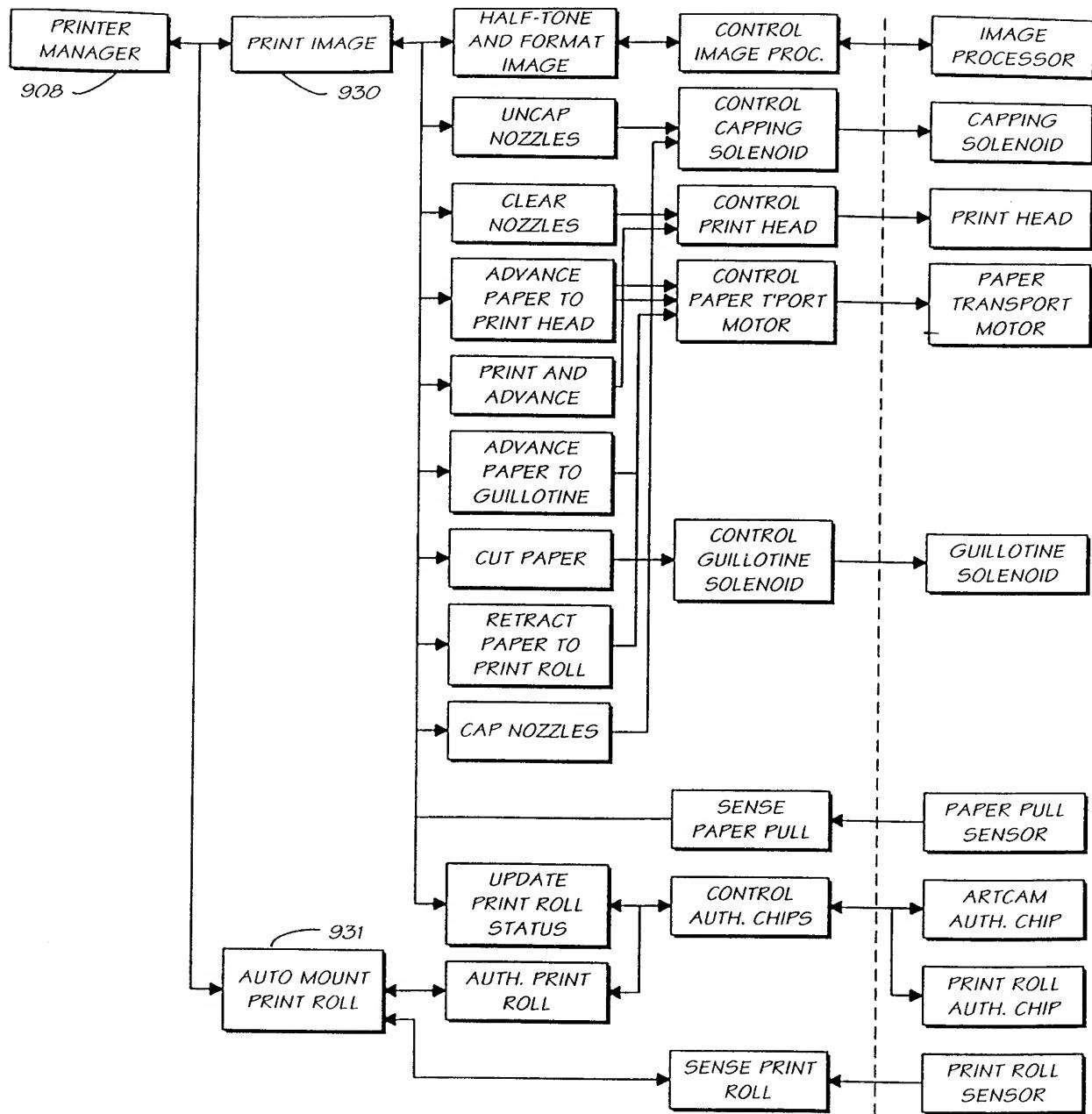


FIG. 224

146 / 246

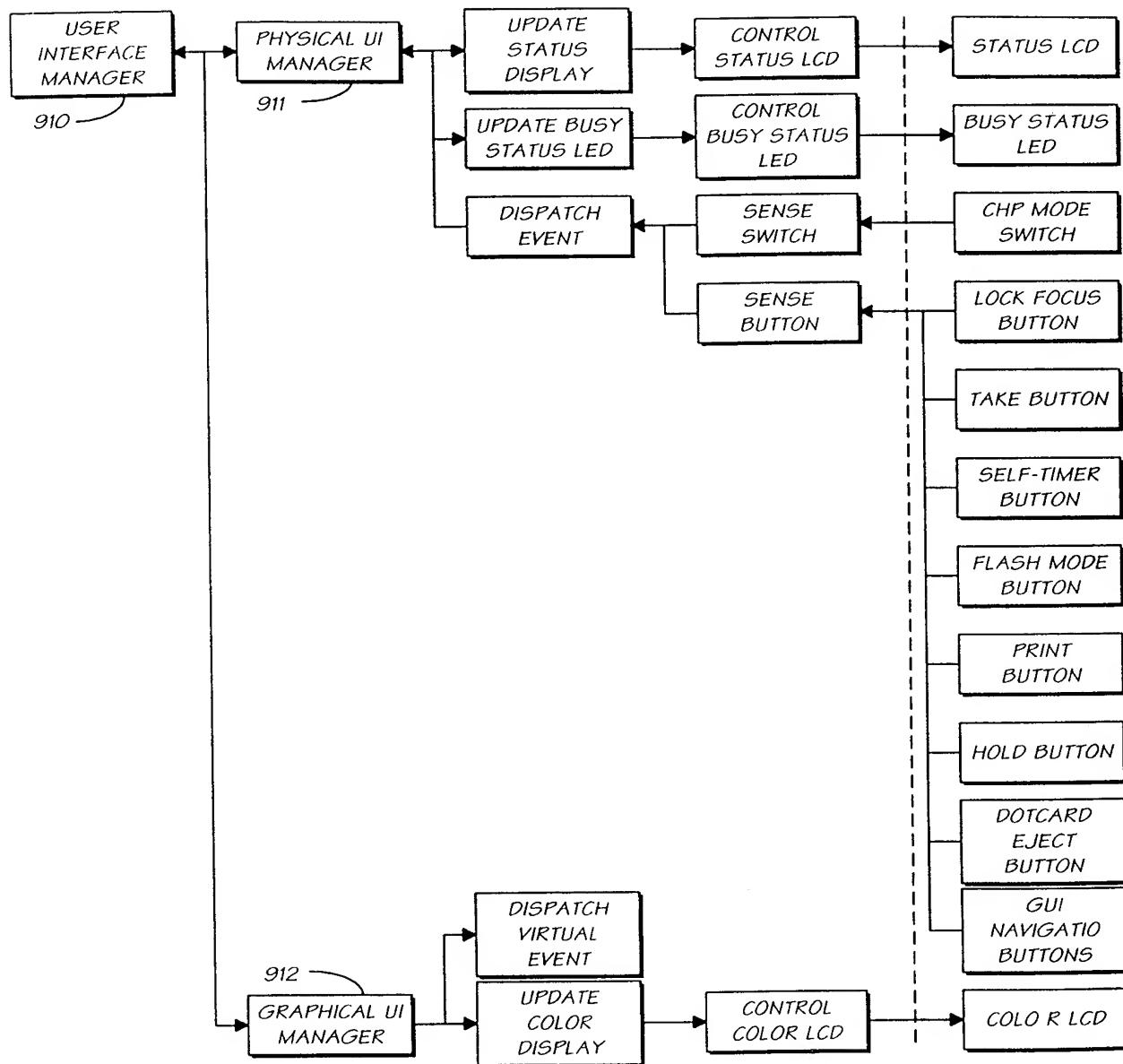


FIG. 225

147 / 246

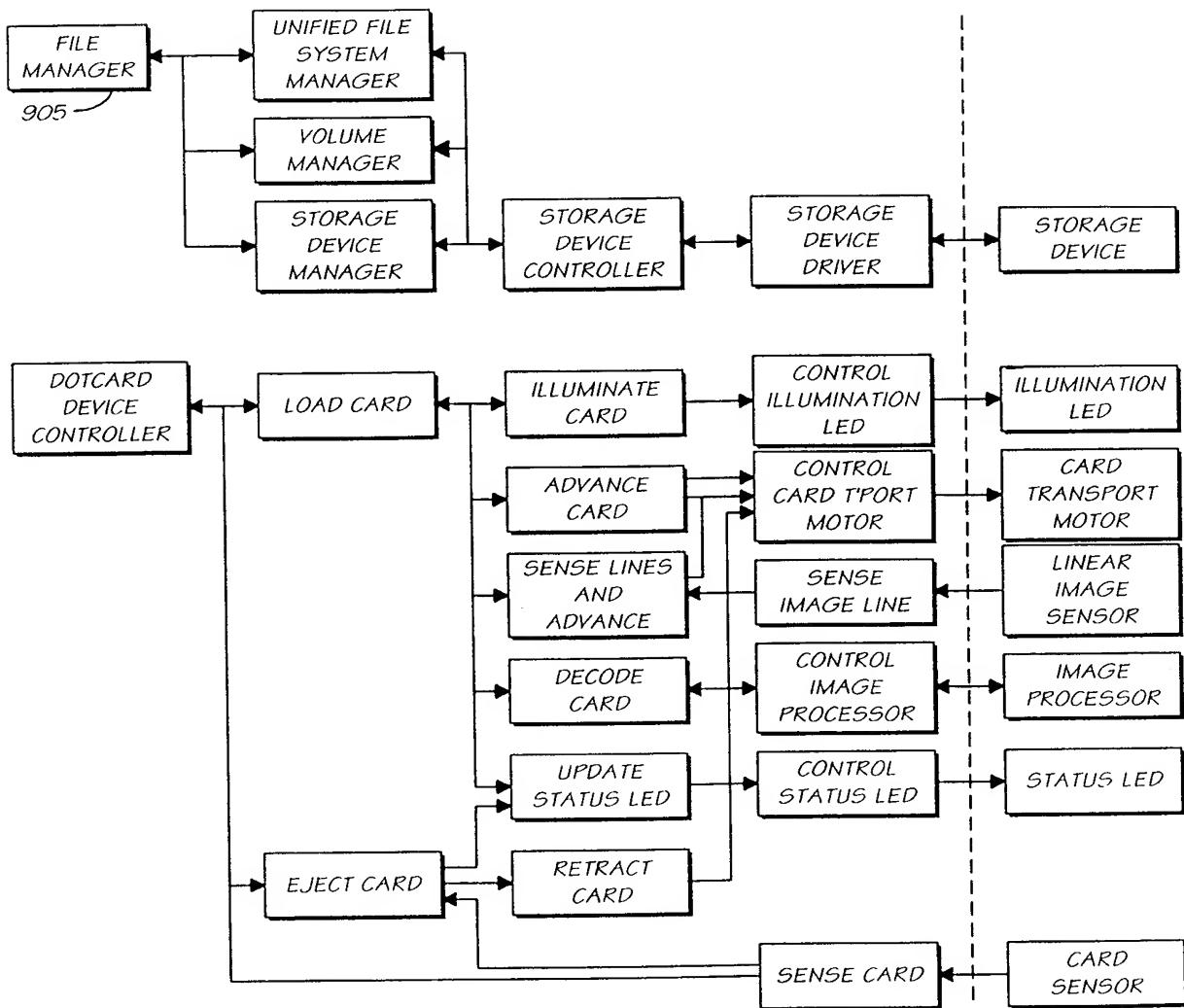


FIG. 226

148 / 246

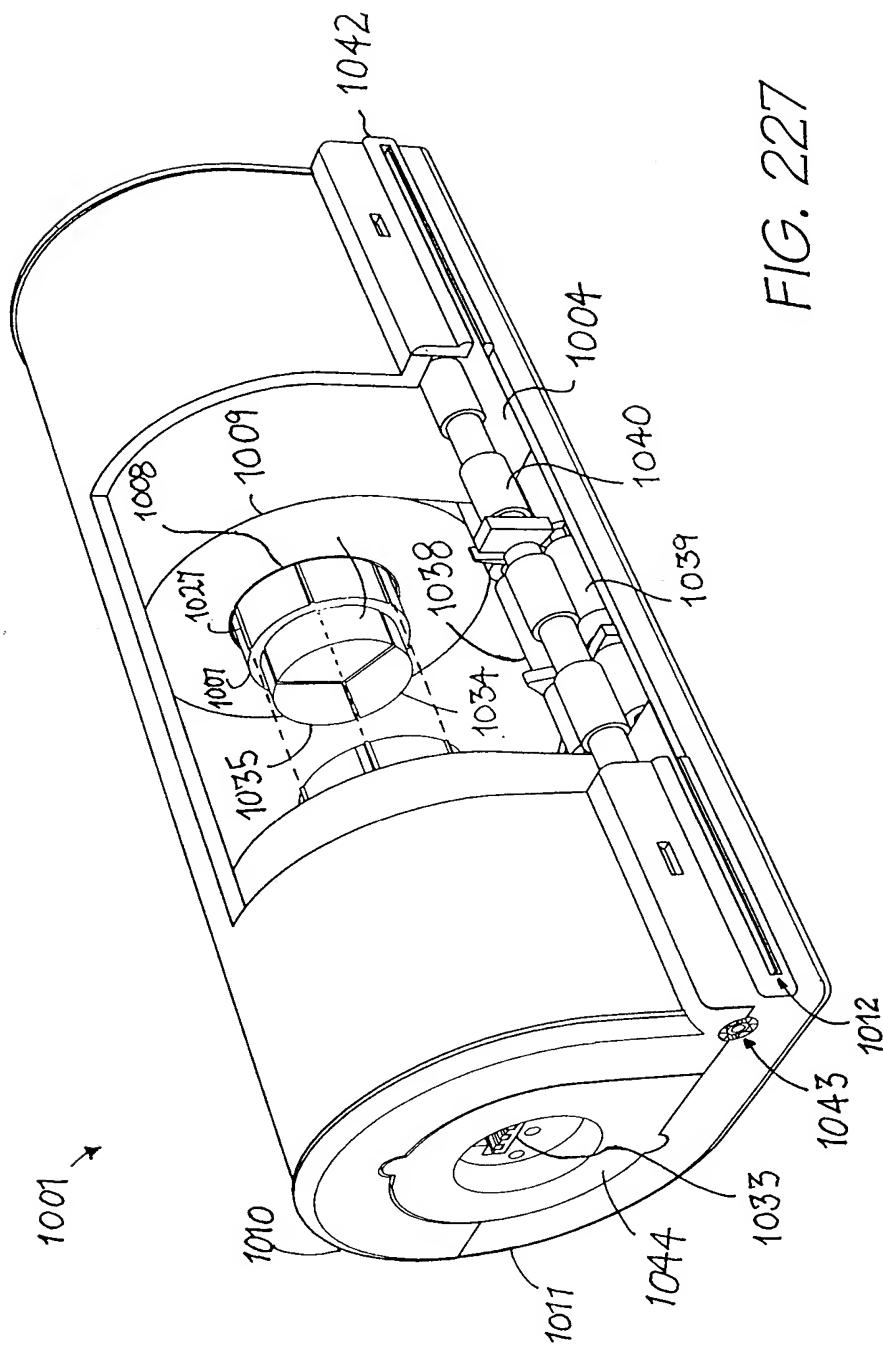
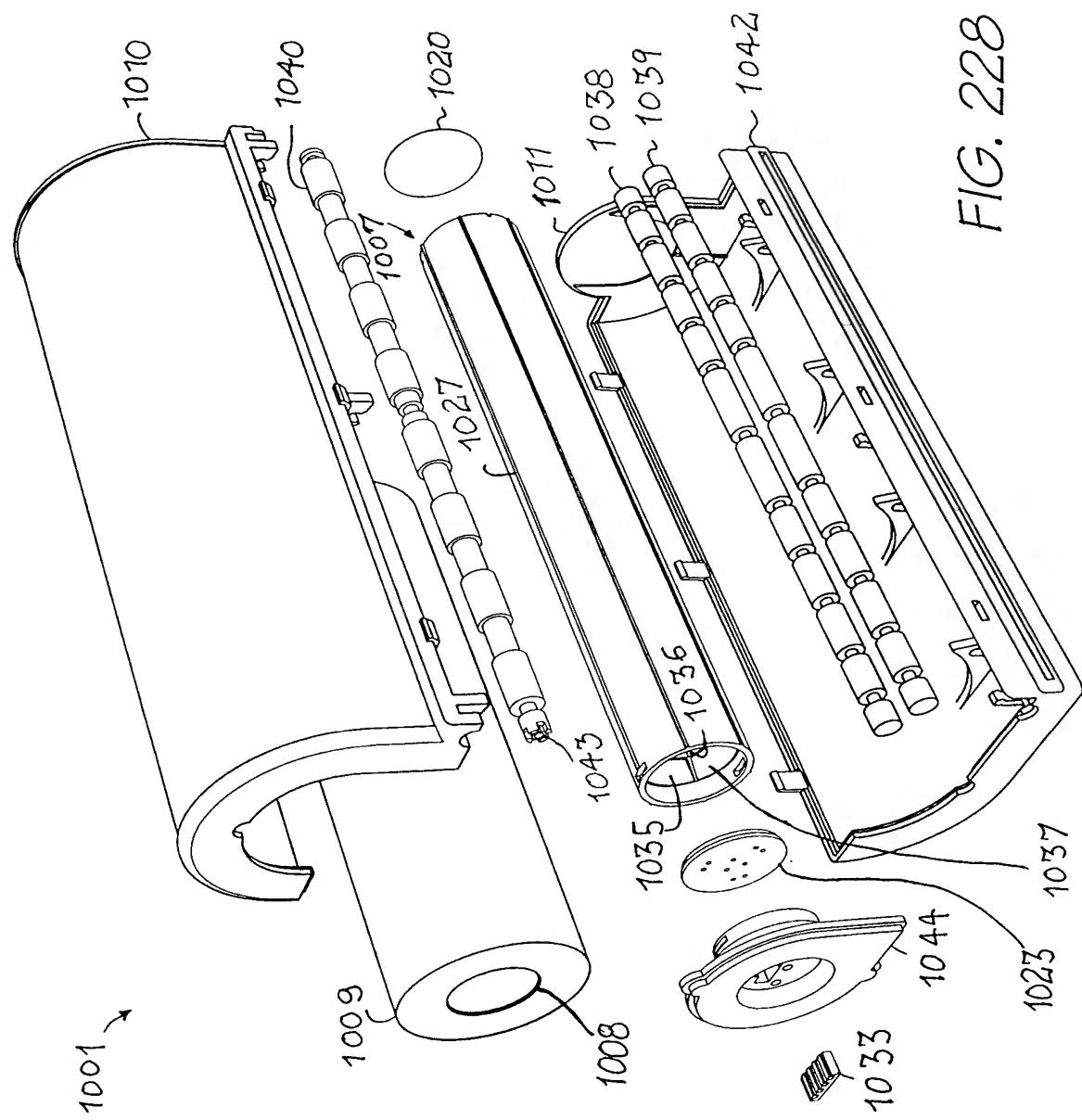
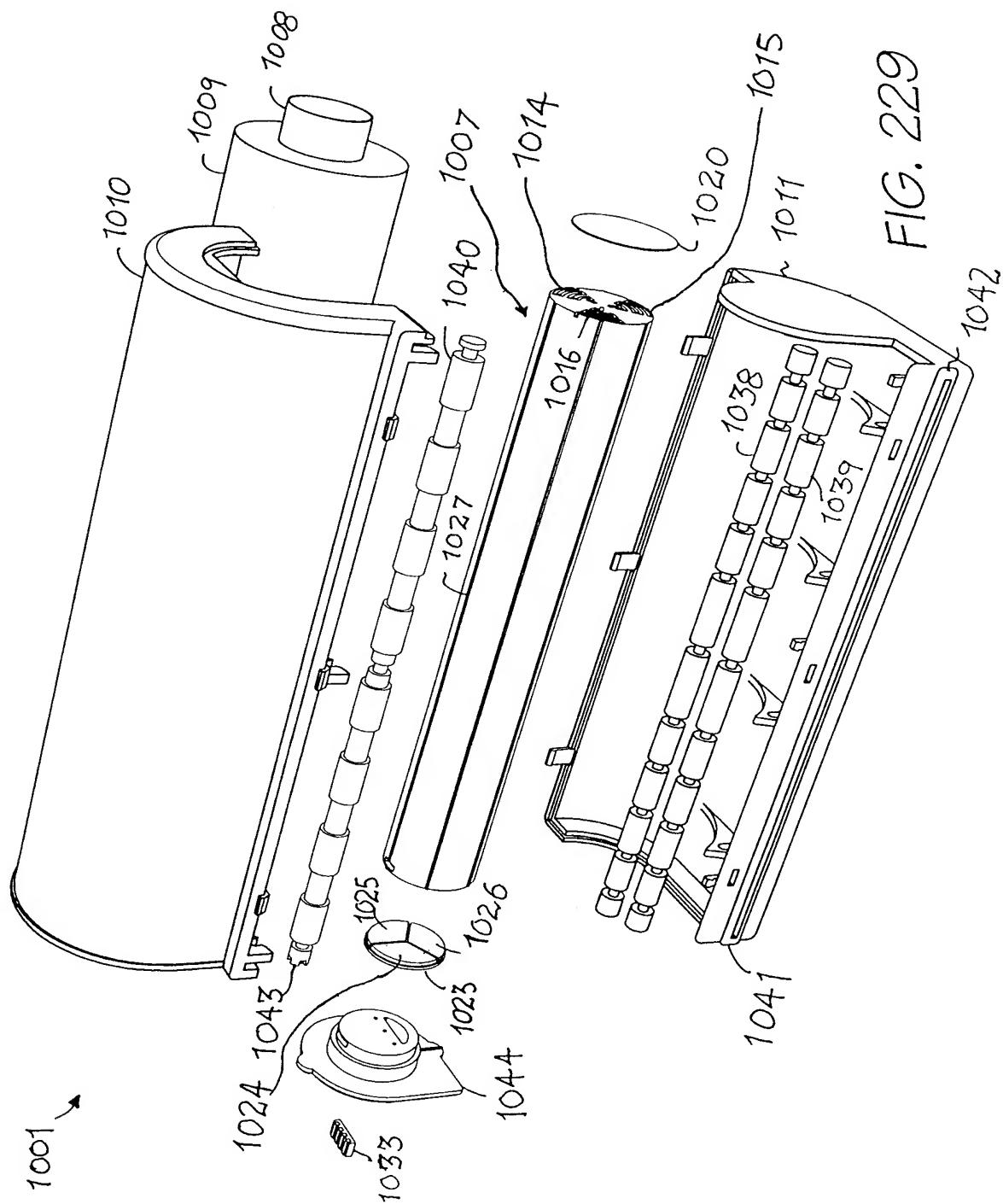


FIG. 227

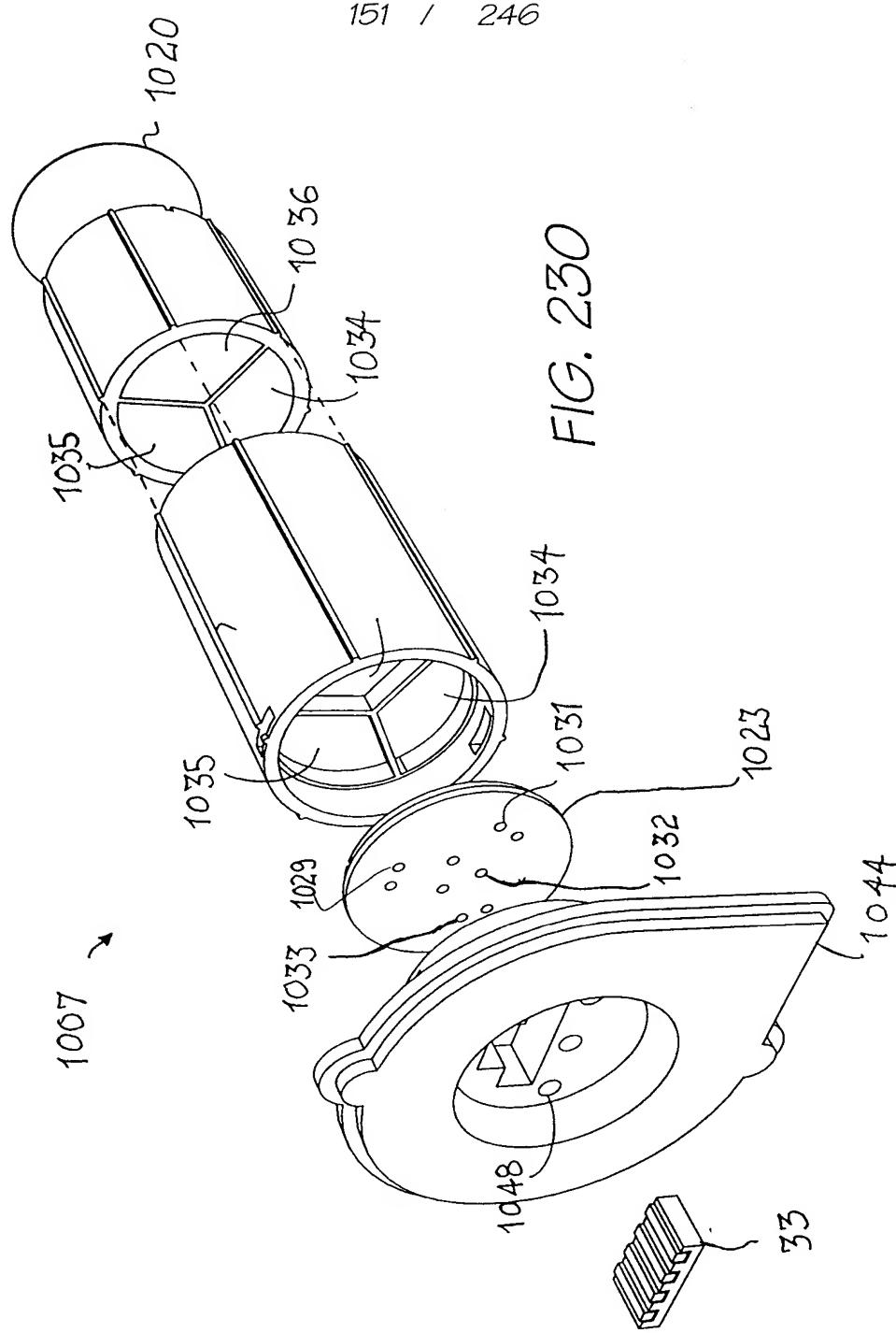
149 / 246



150 / 246



151 / 246



152 / 246

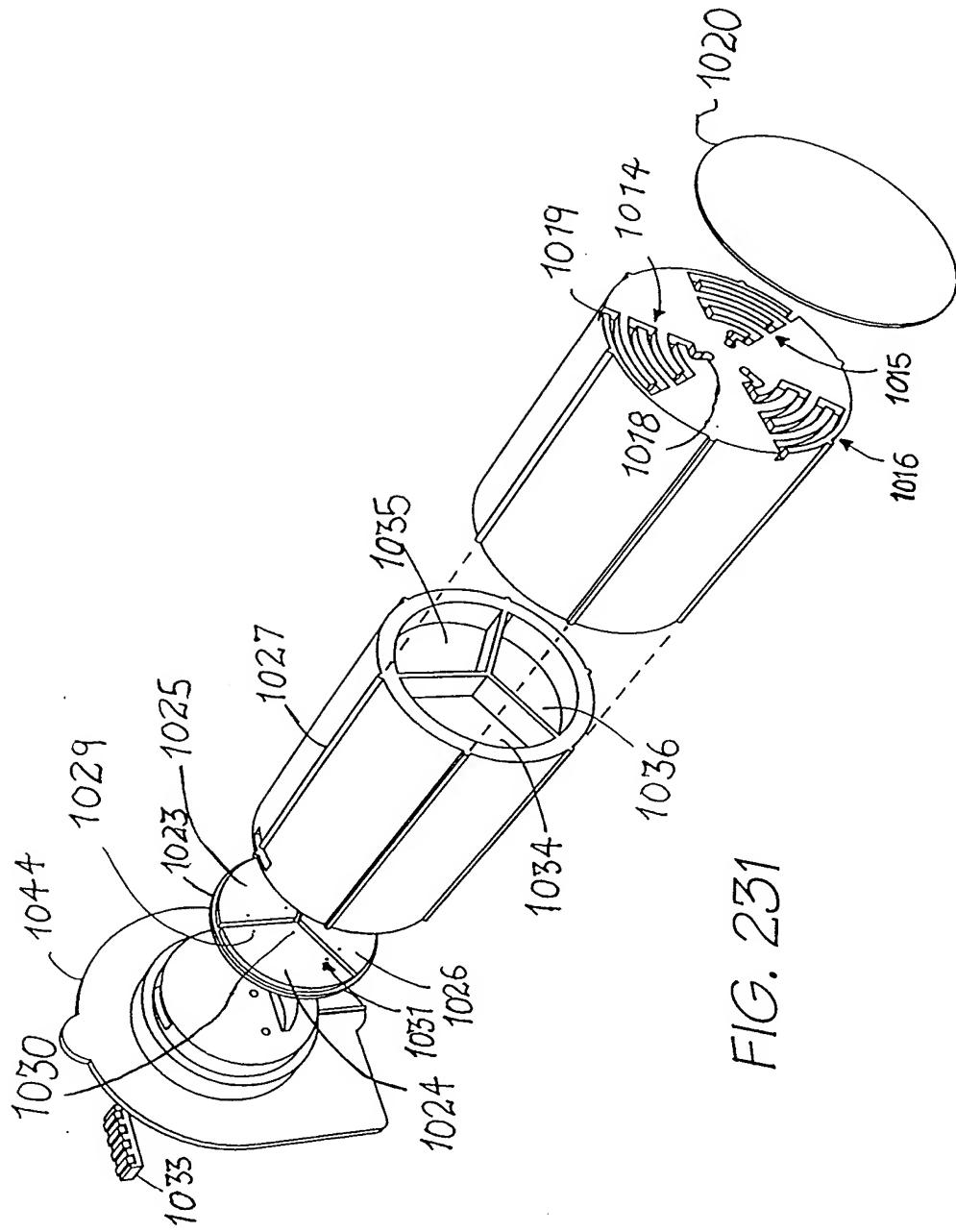
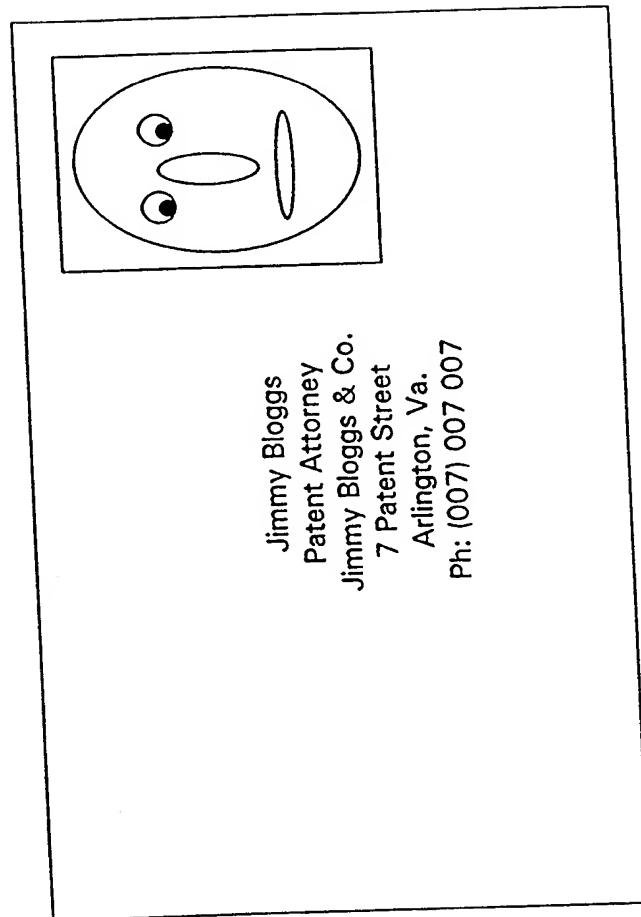


FIG. 231

153 / 246

FIG. 232



154 / 246

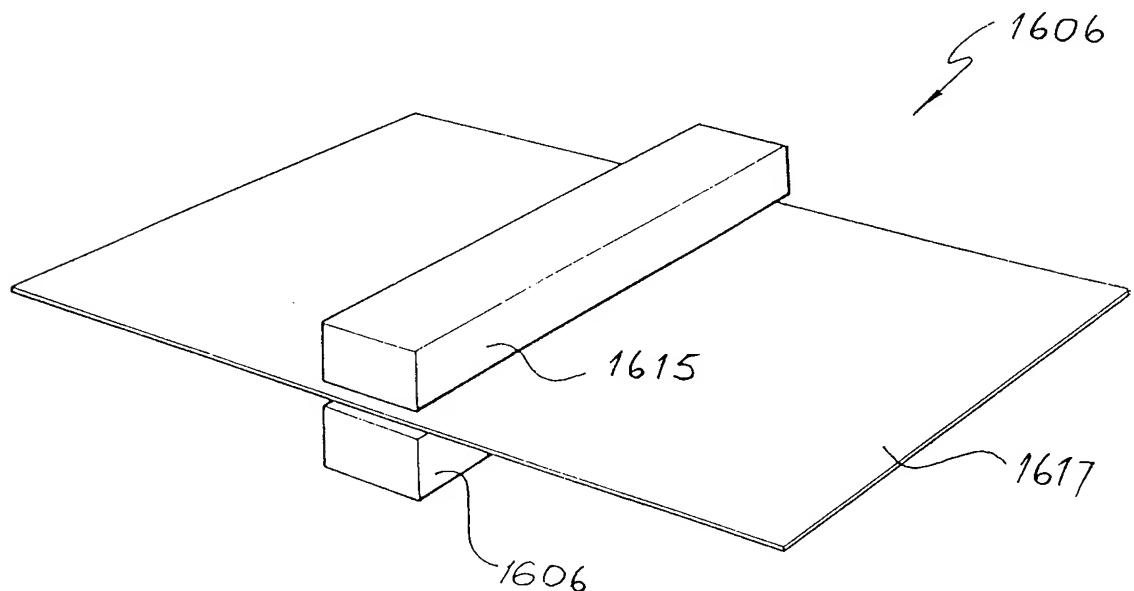
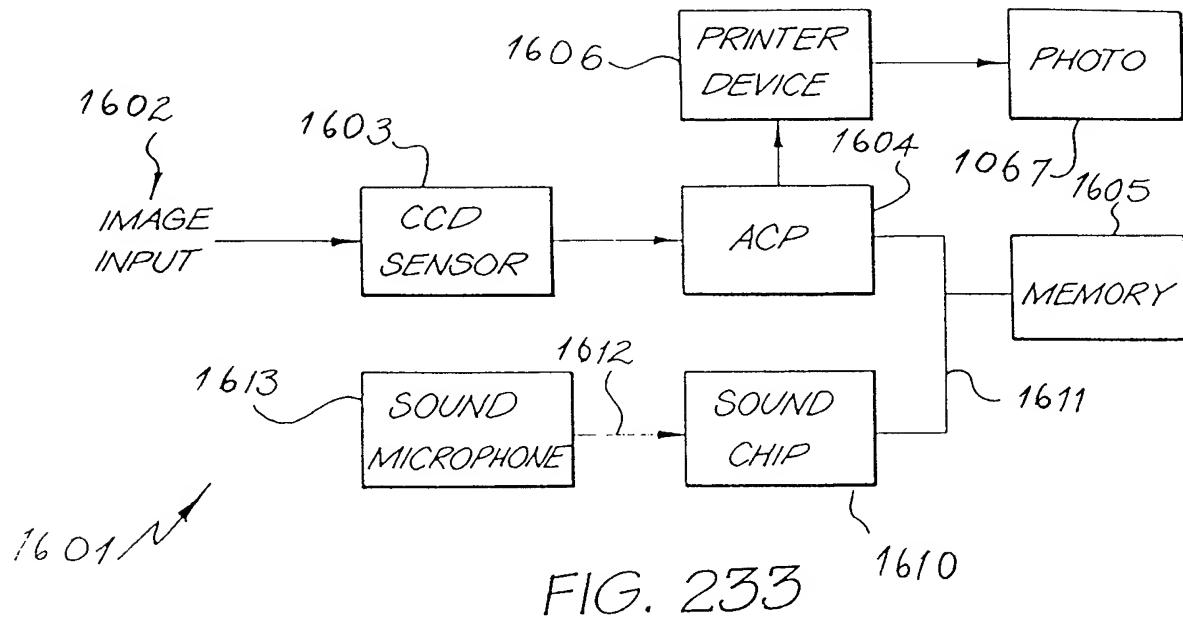


FIG. 234

155 / 246

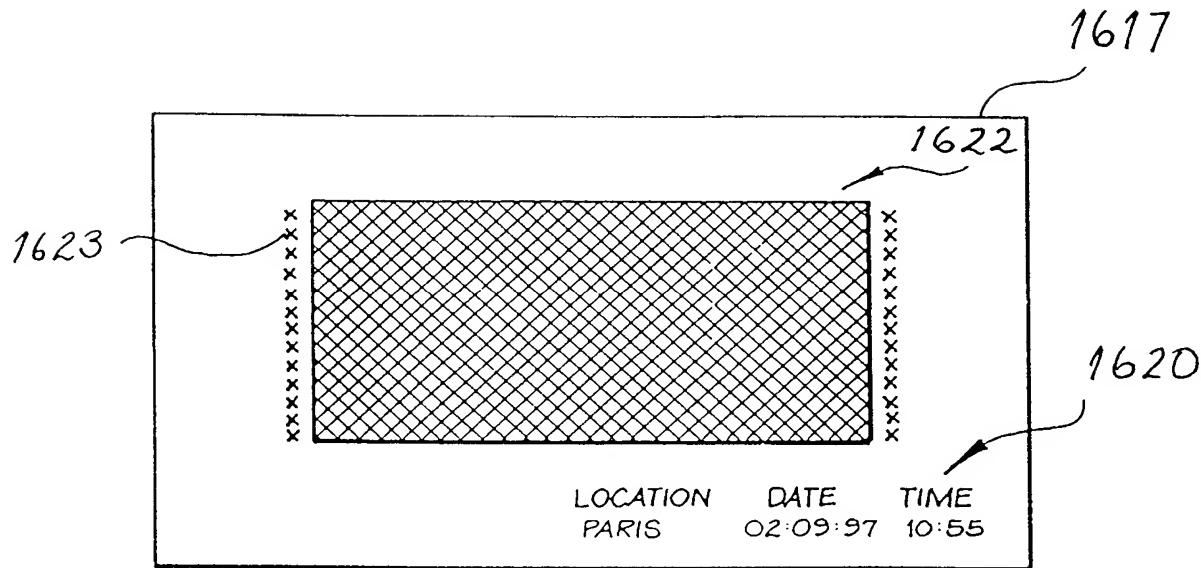


FIG. 235

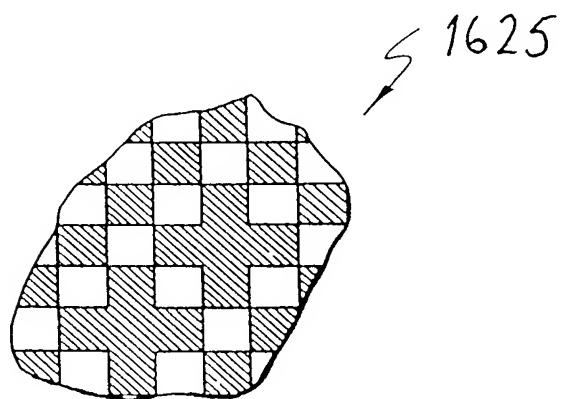
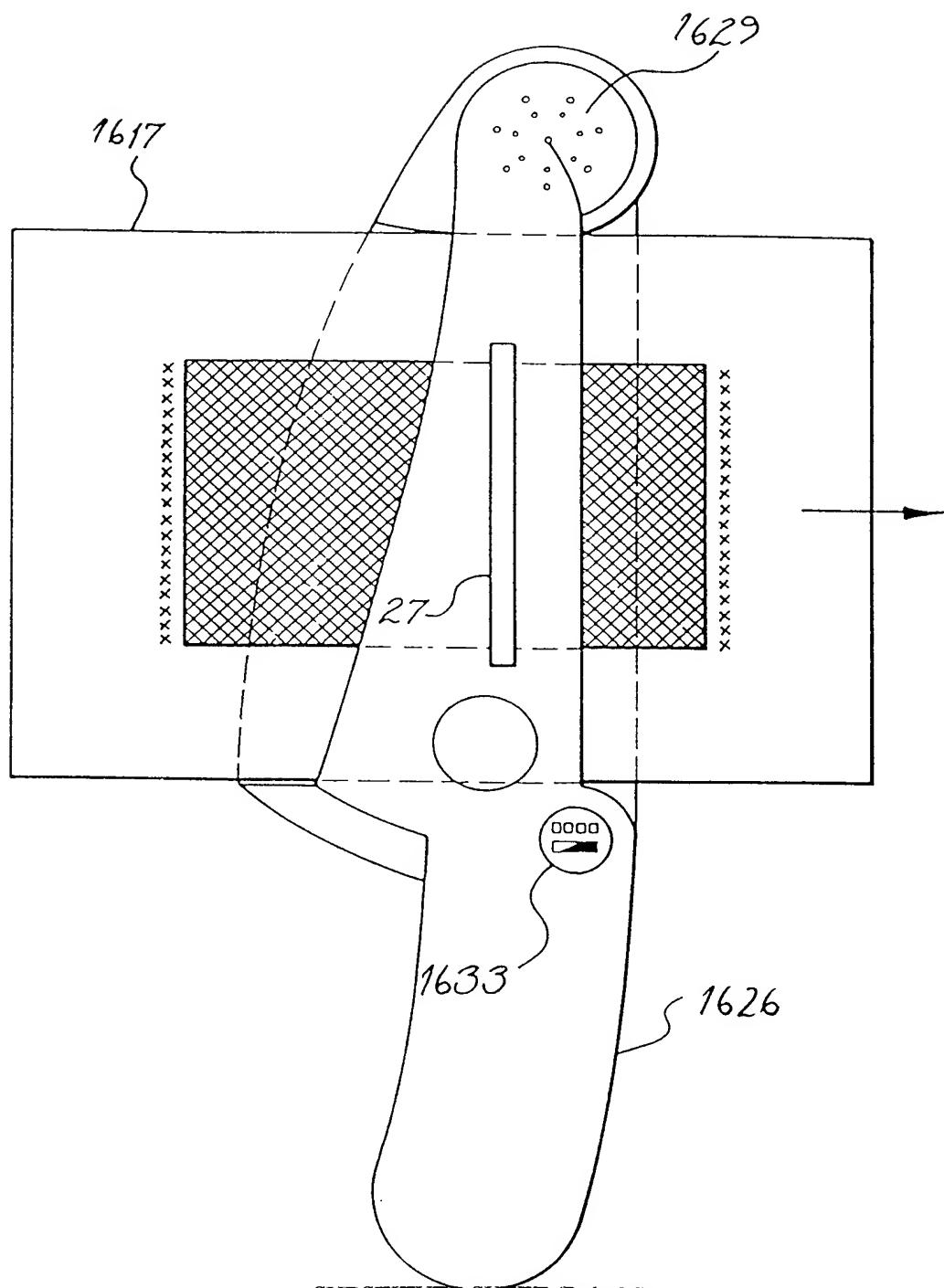


FIG. 236

156 / 246



SUBSTITUTE SHEET (Rule 26)

FIG. 237

157 / 246

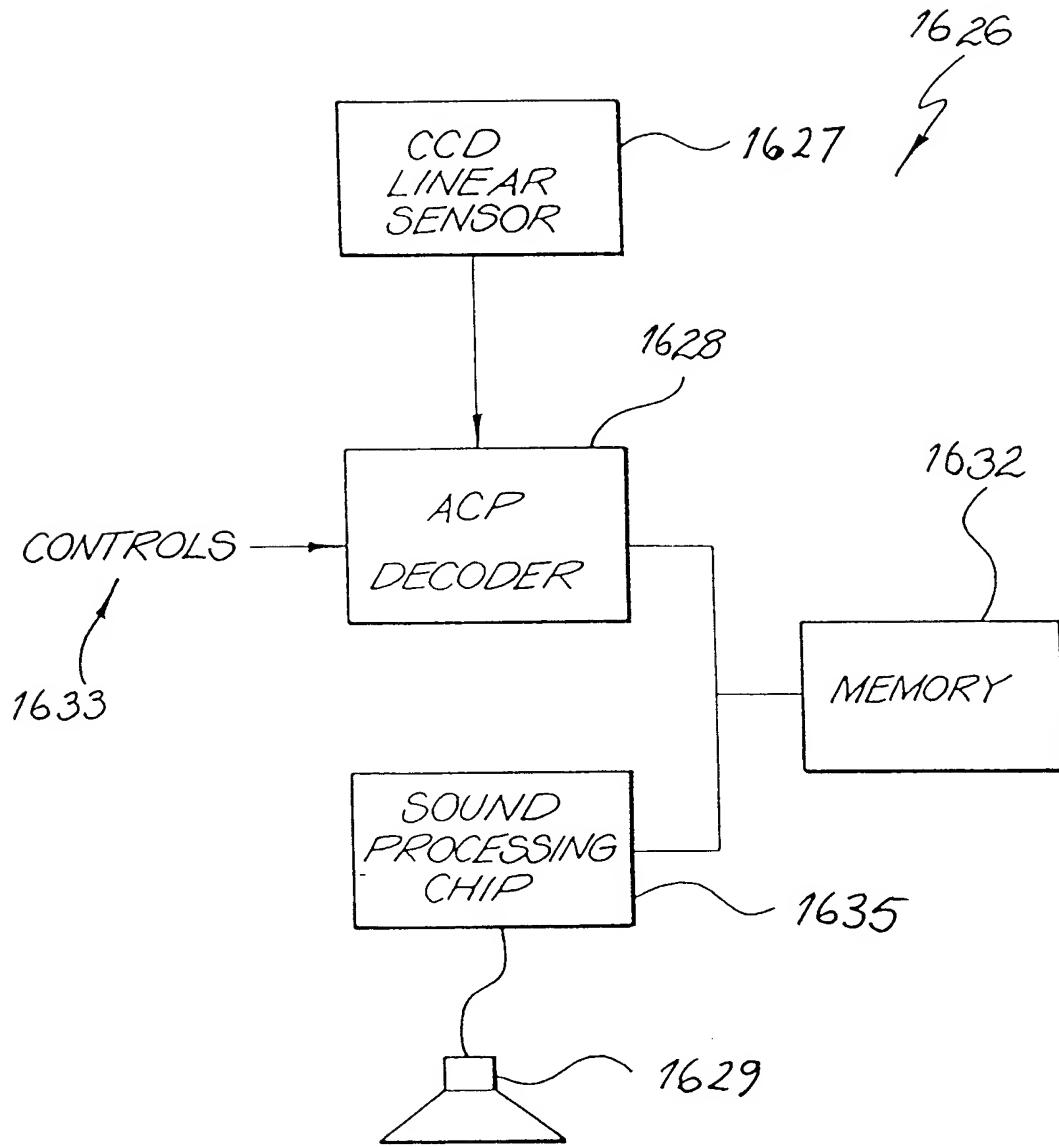


FIG. 238

158 / 246

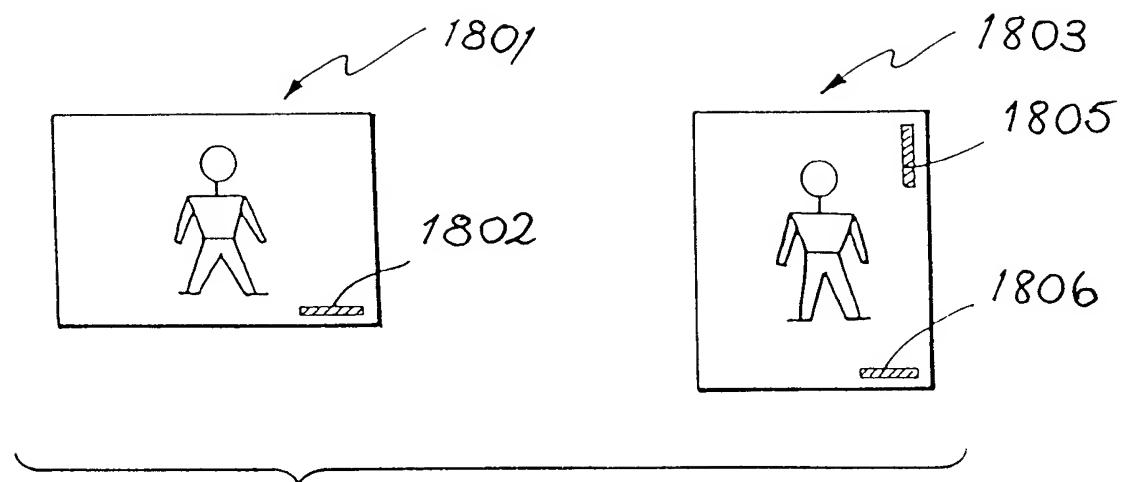


FIG. 239

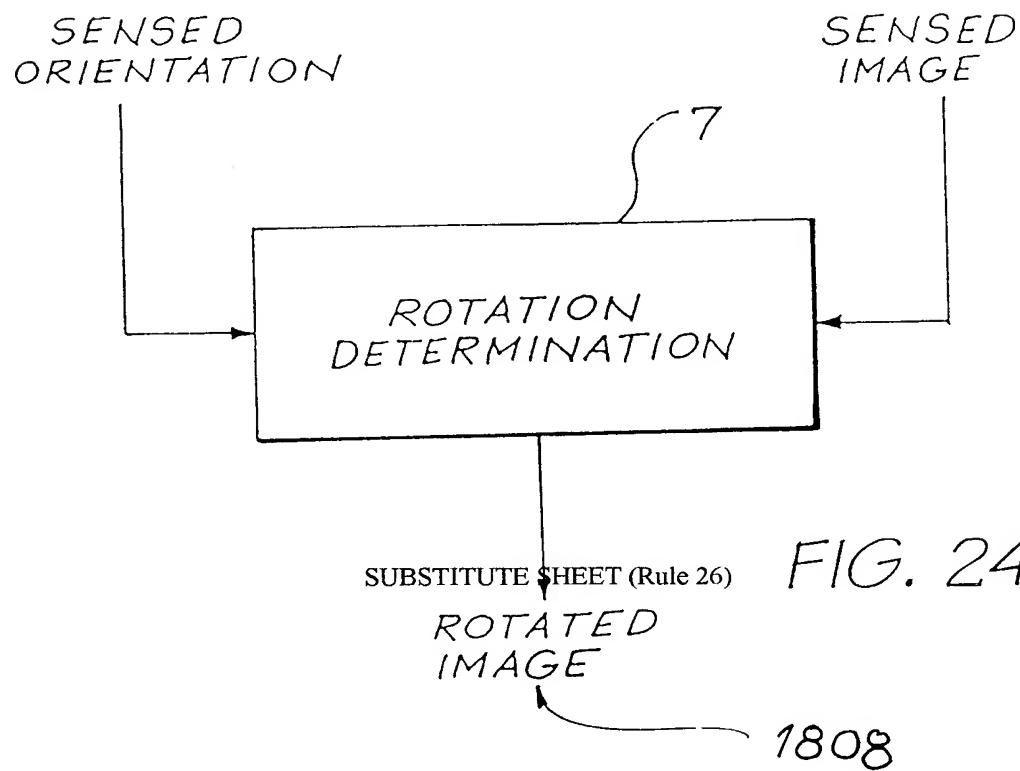


FIG. 240

SUBSTITUTE SHEET (Rule 26)

159 / 246

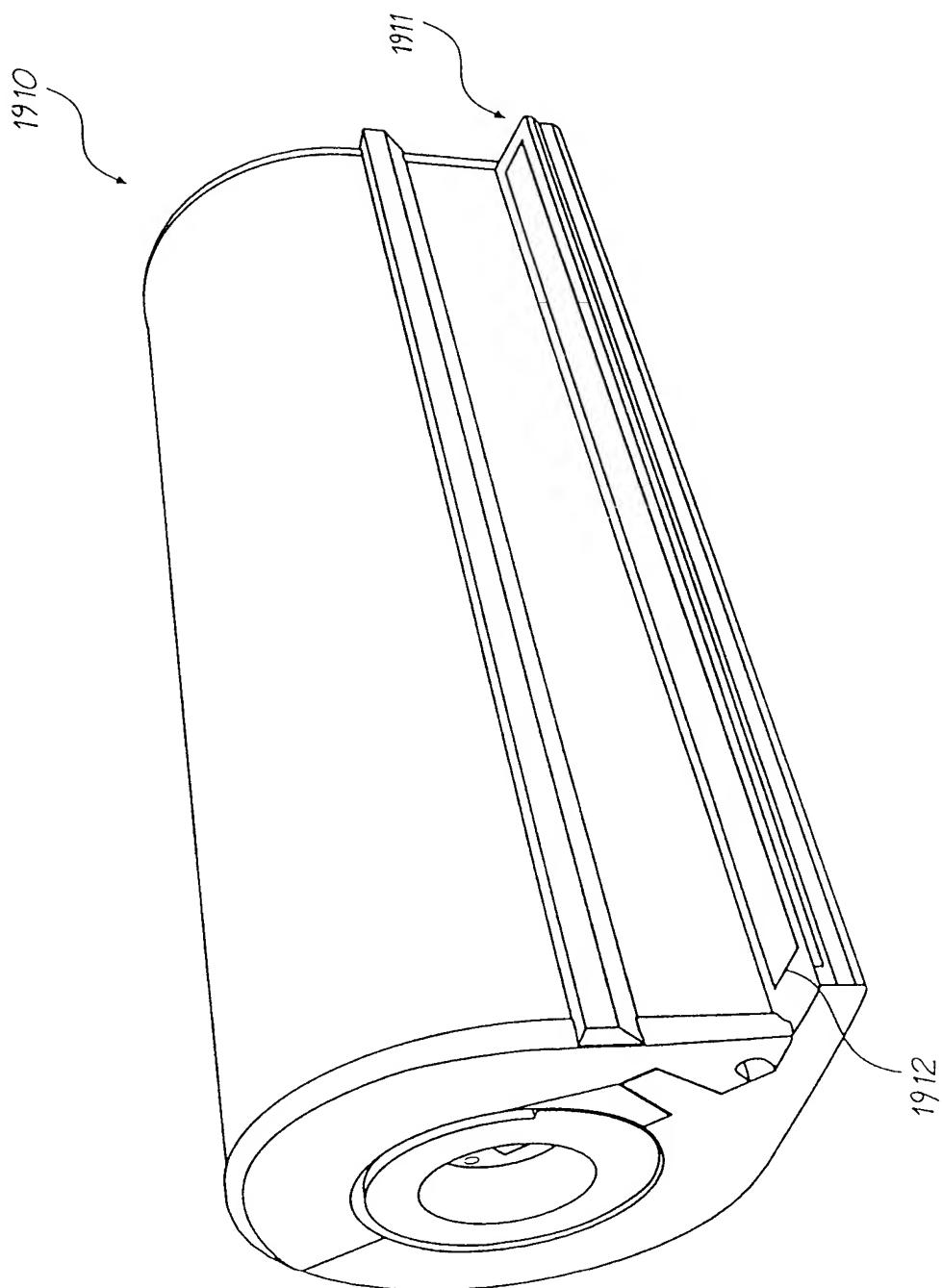


FIG. 241

160 / 246

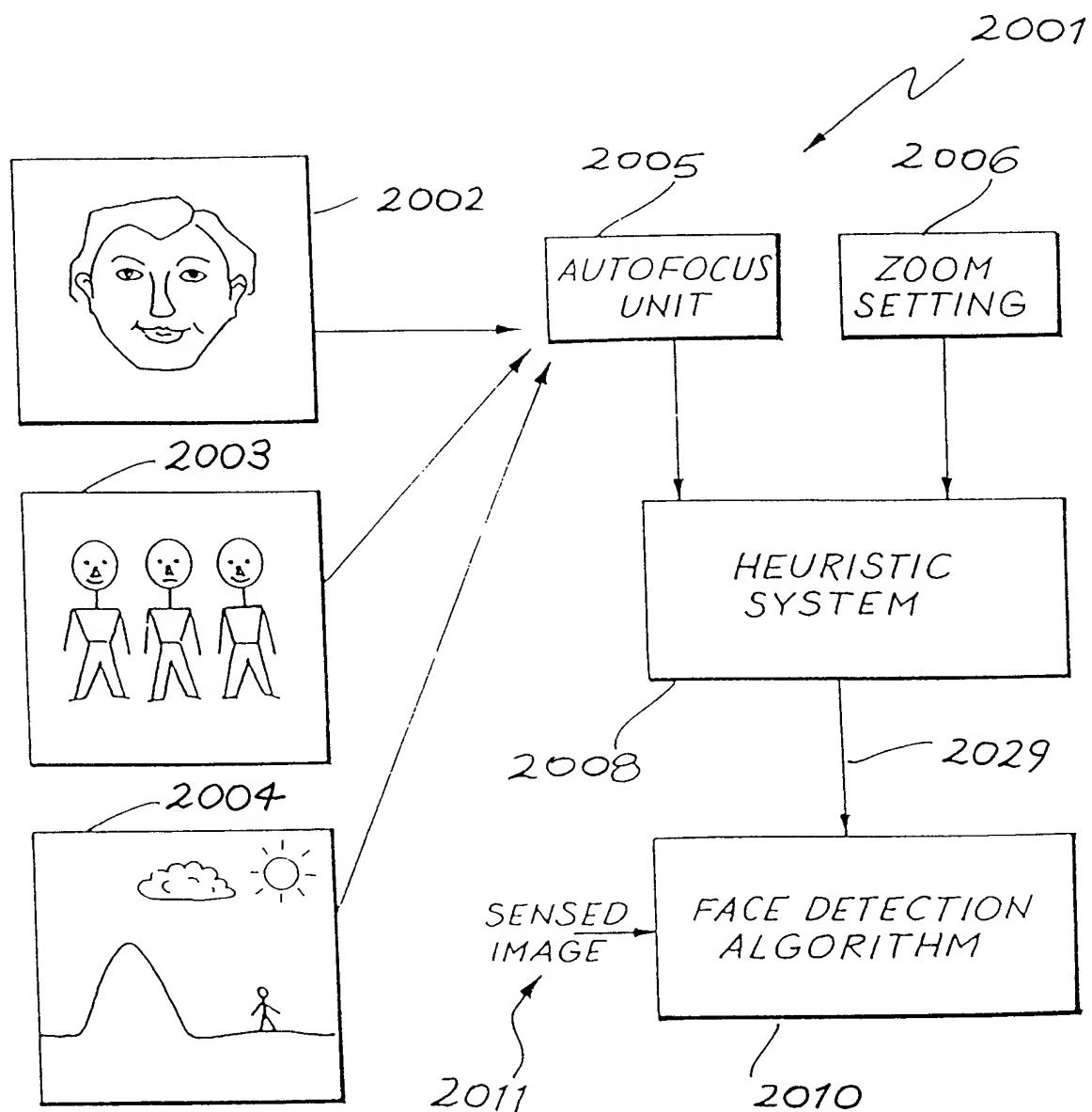


FIG. 242

161 / 246

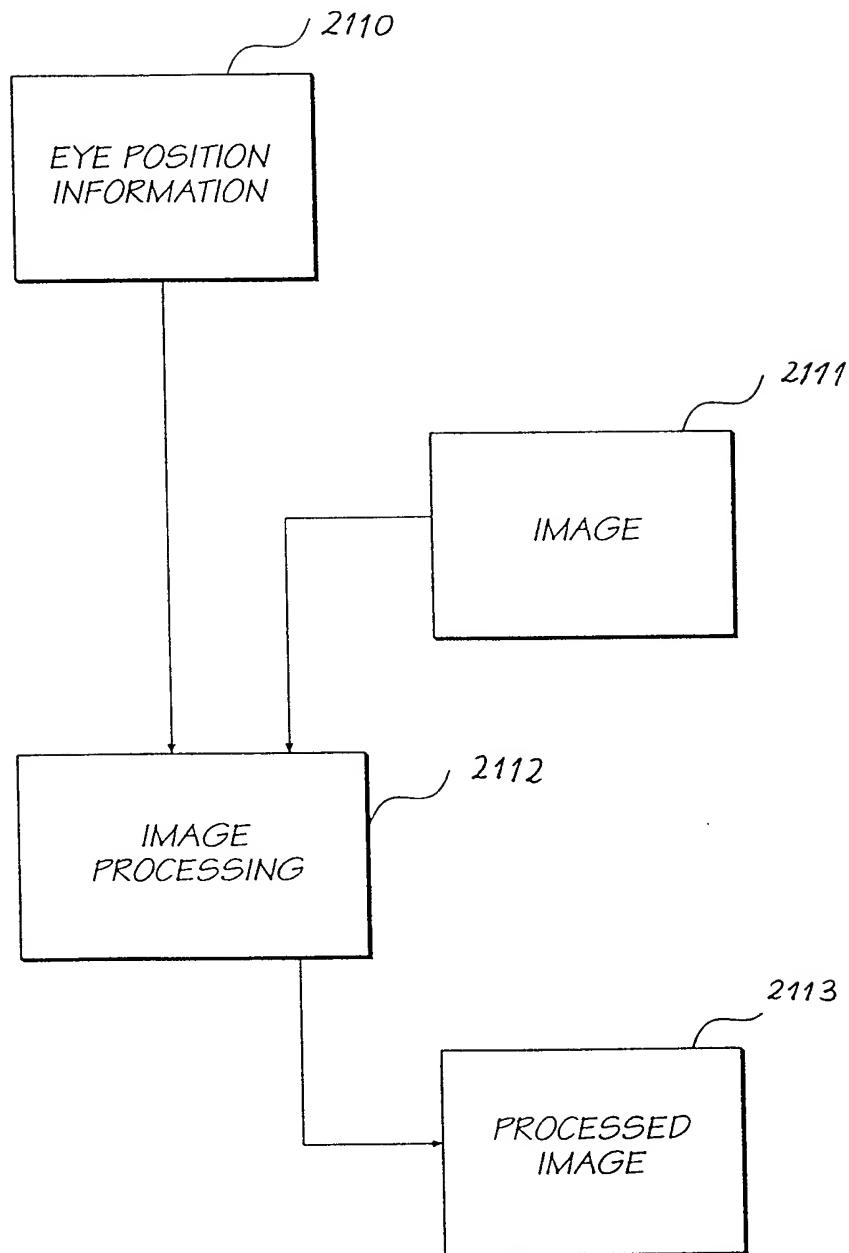


FIG. 243

162 / 246

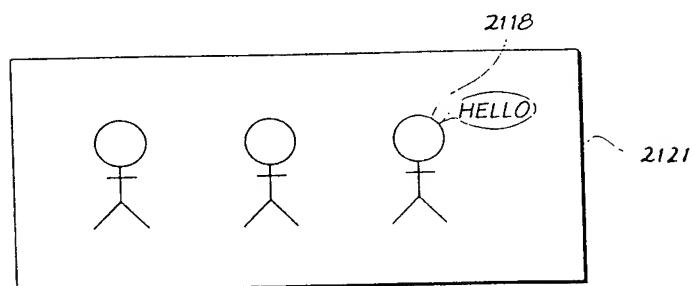
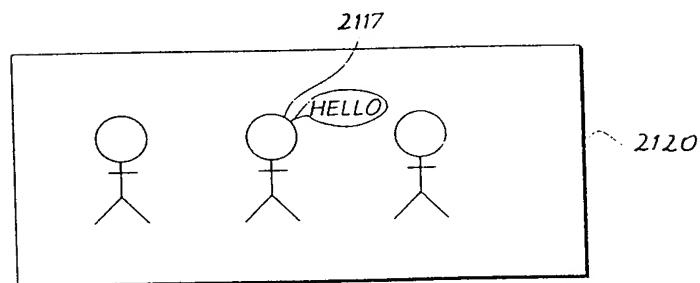
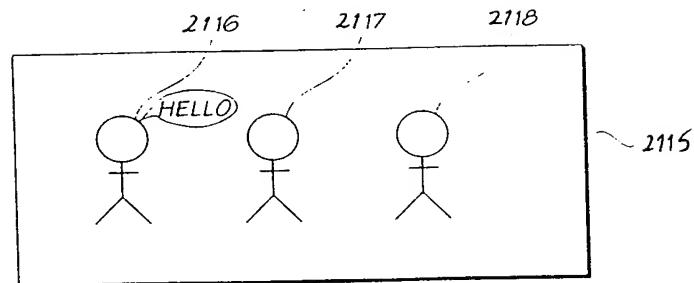


FIG. 244

163 / 246

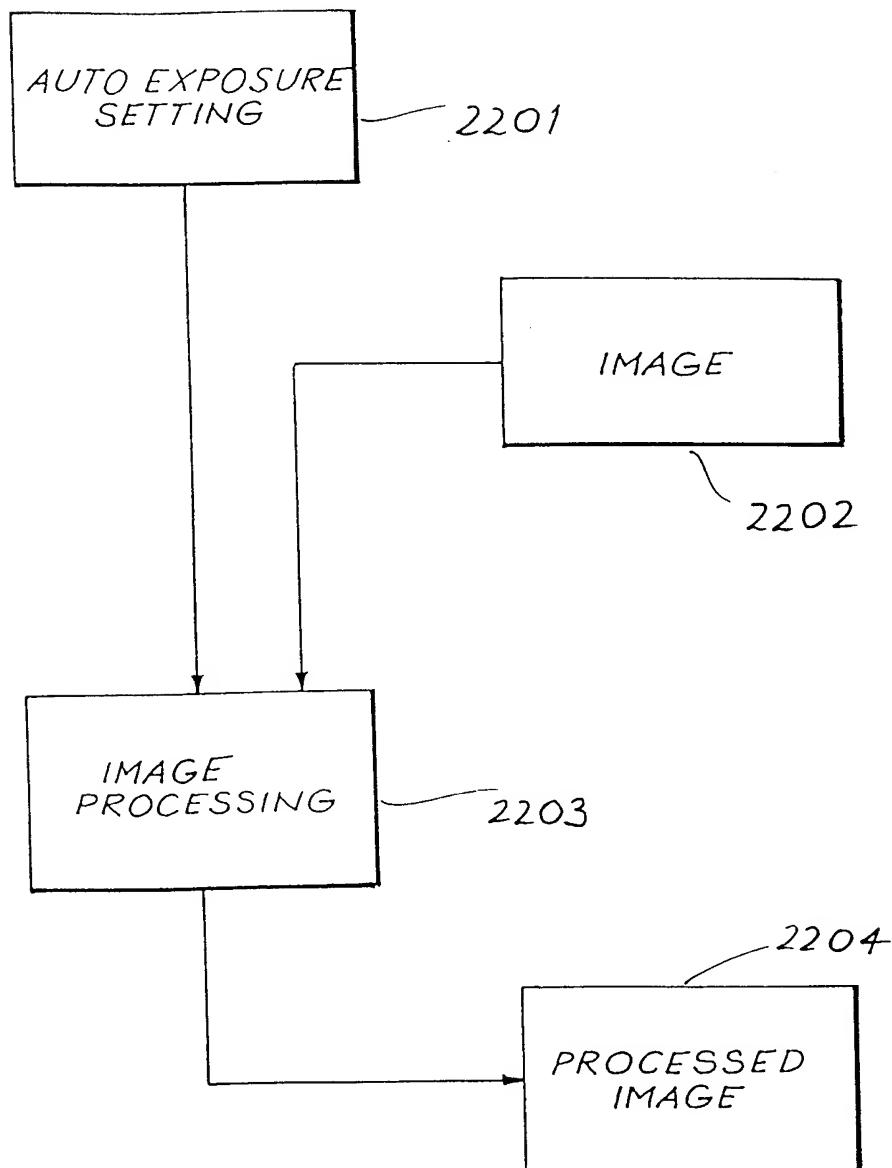


FIG. 245

164 / 246

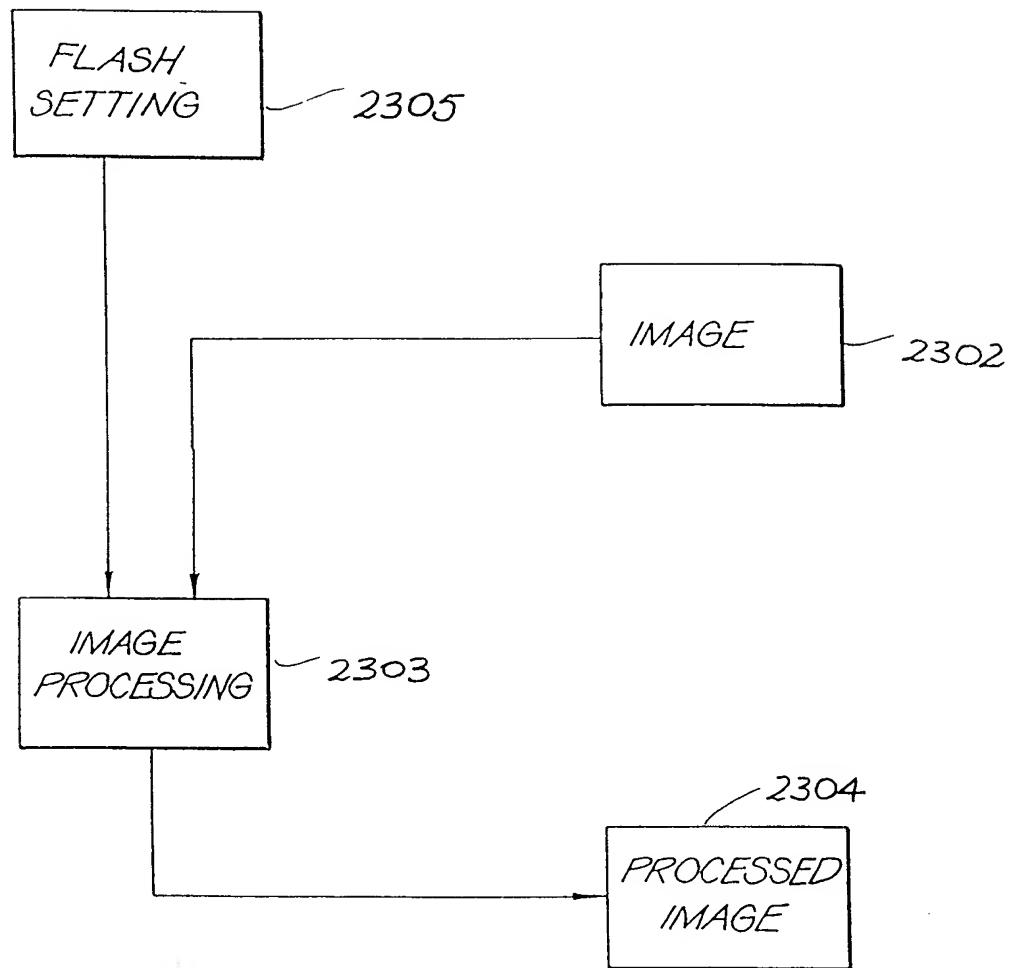


FIG. 246

165 / 246

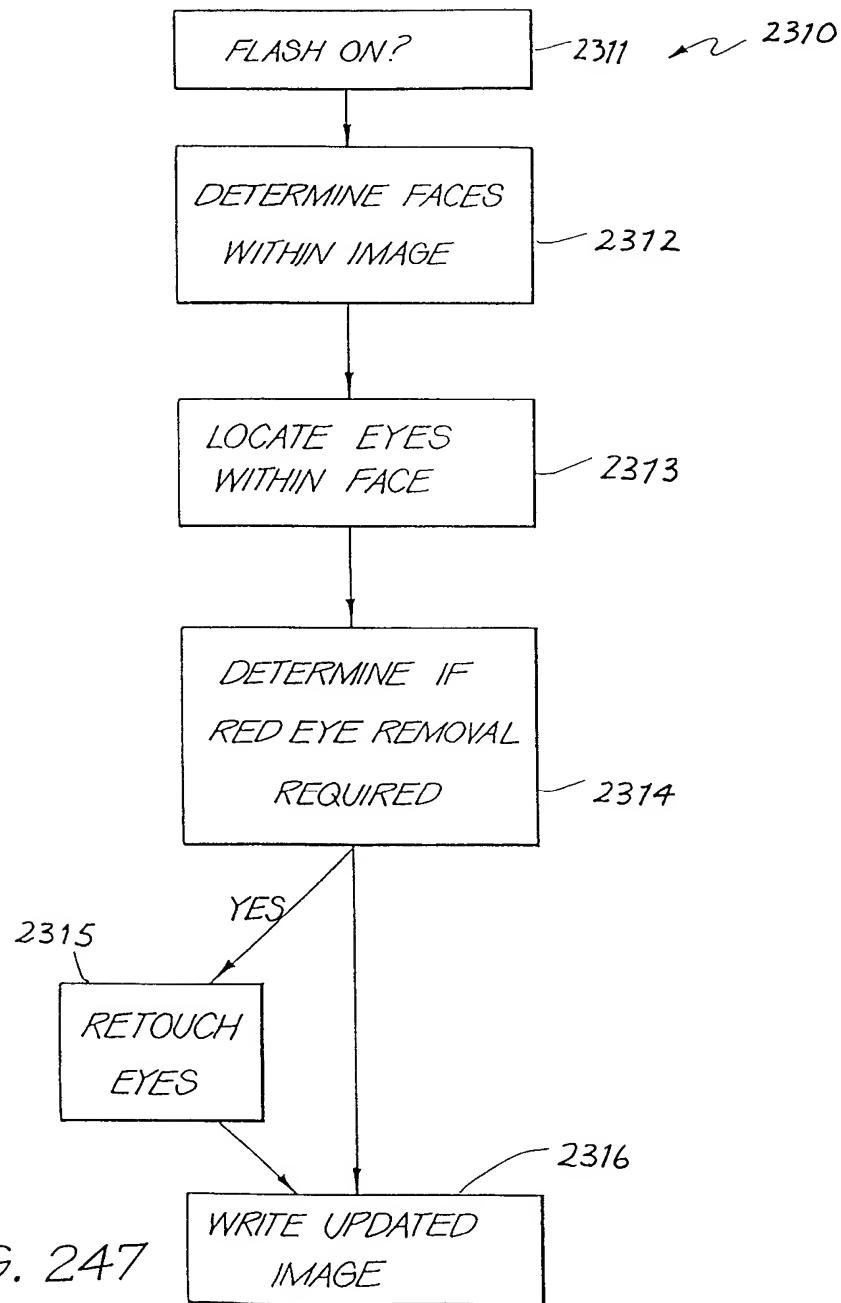


FIG. 247

166 / 246

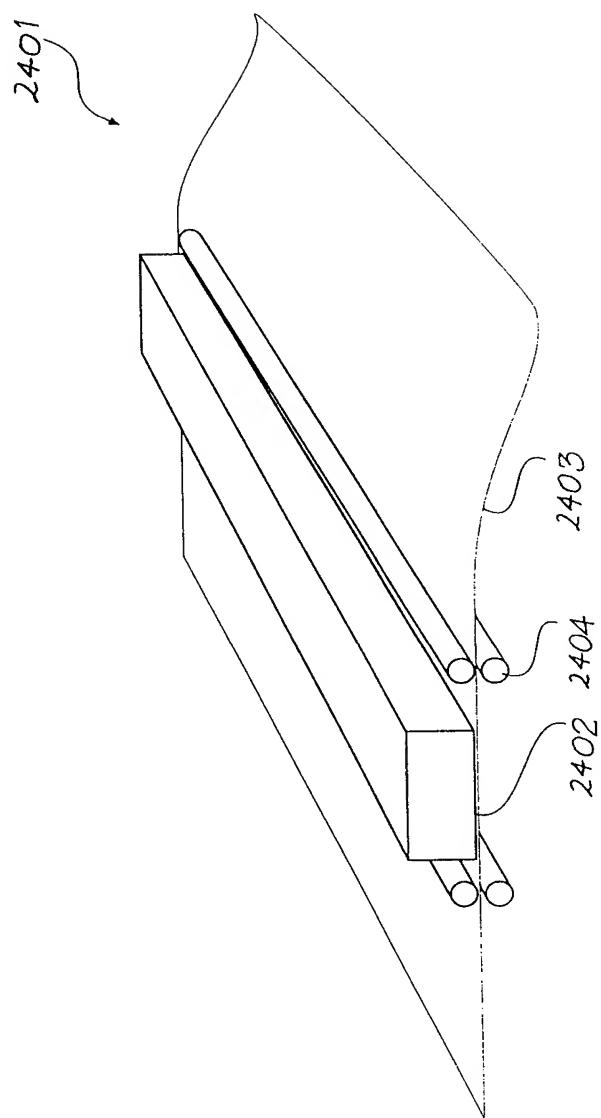


FIG. 248

167 / 246

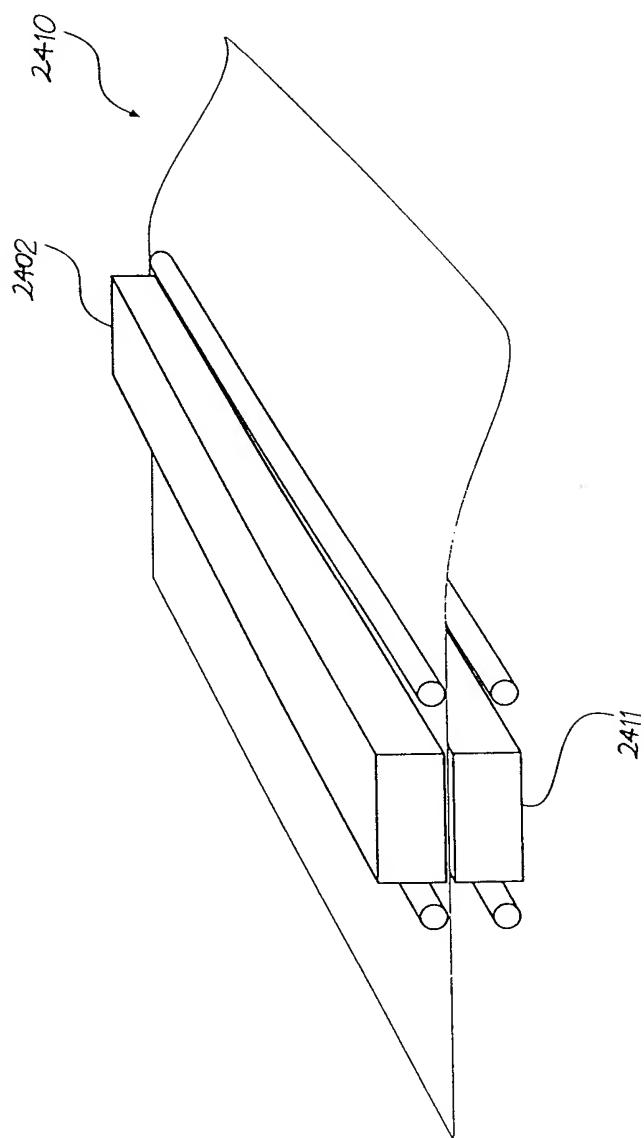


FIG. 24.9

168 / 246

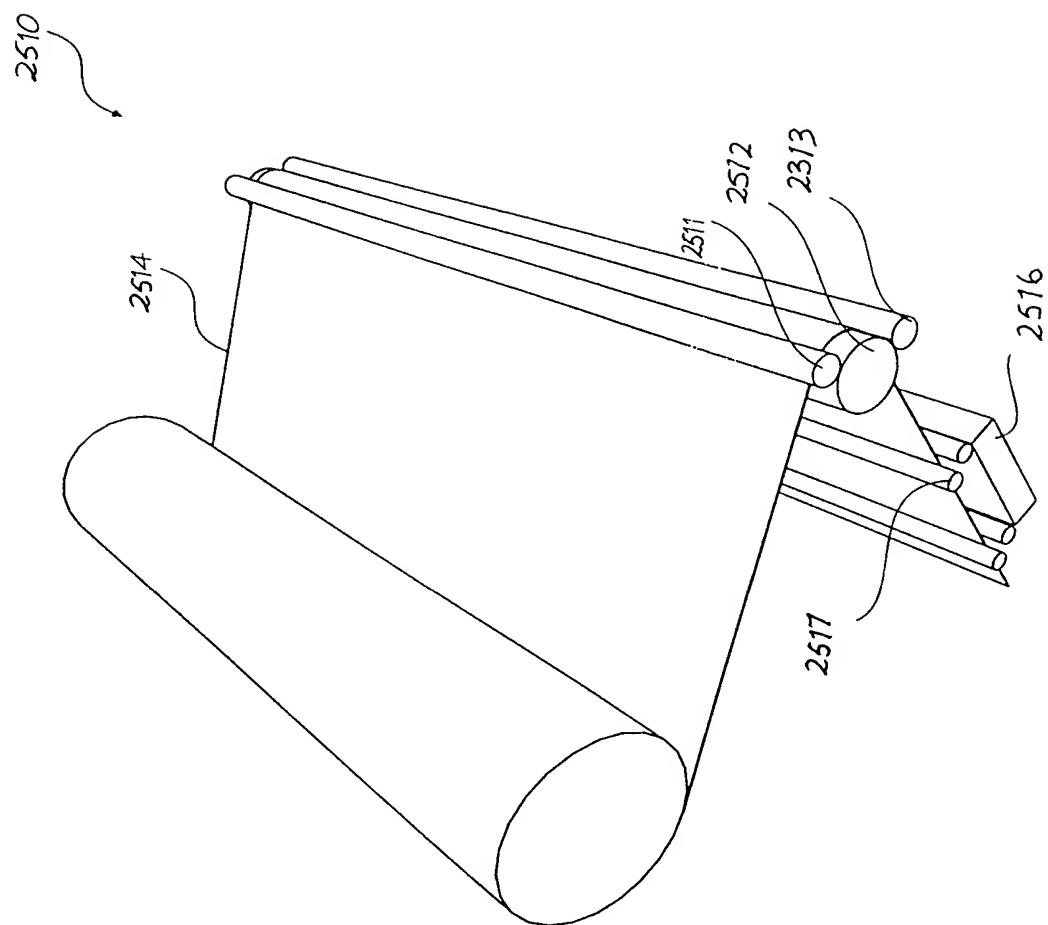


FIG. 250

169 / 246

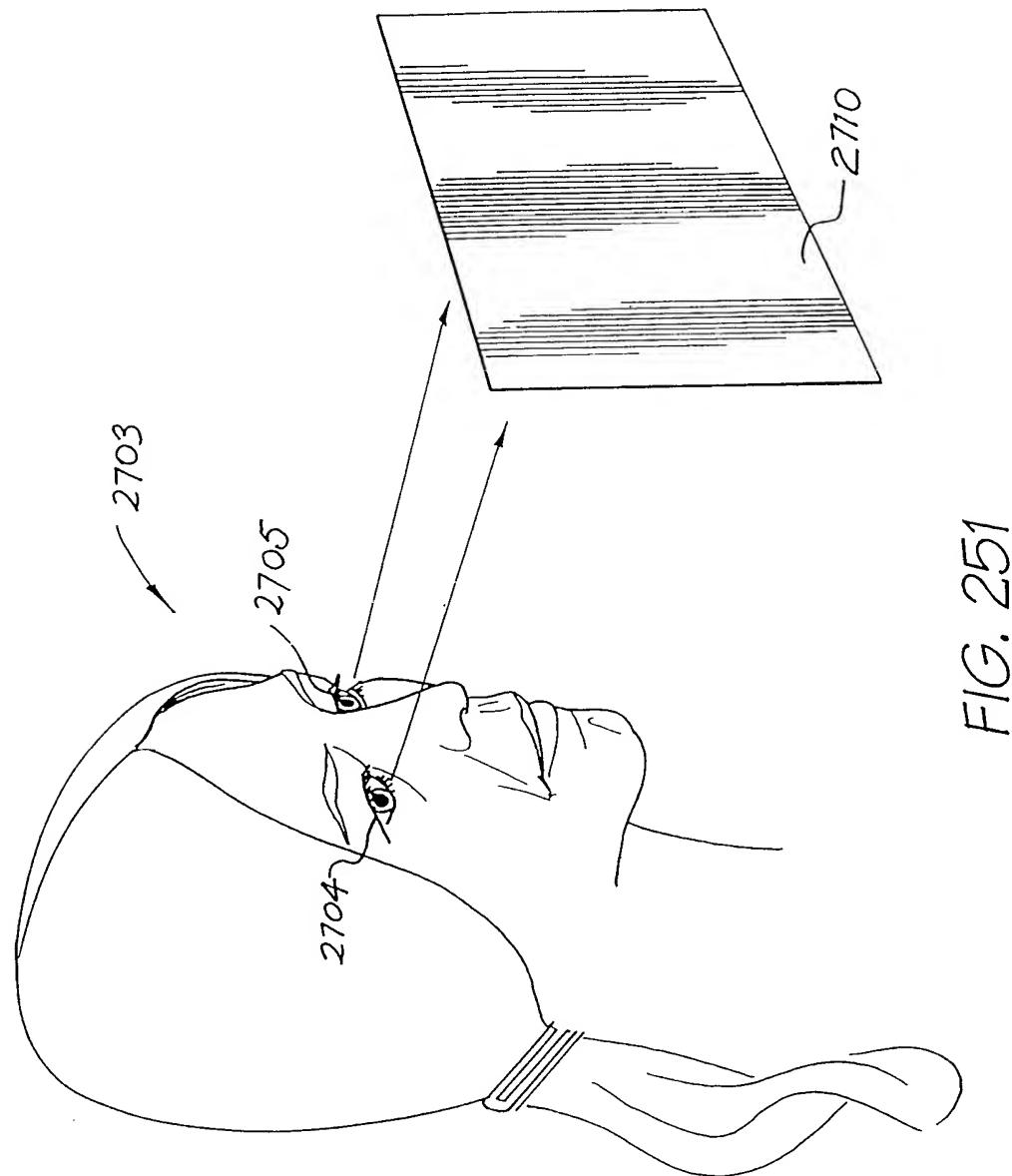
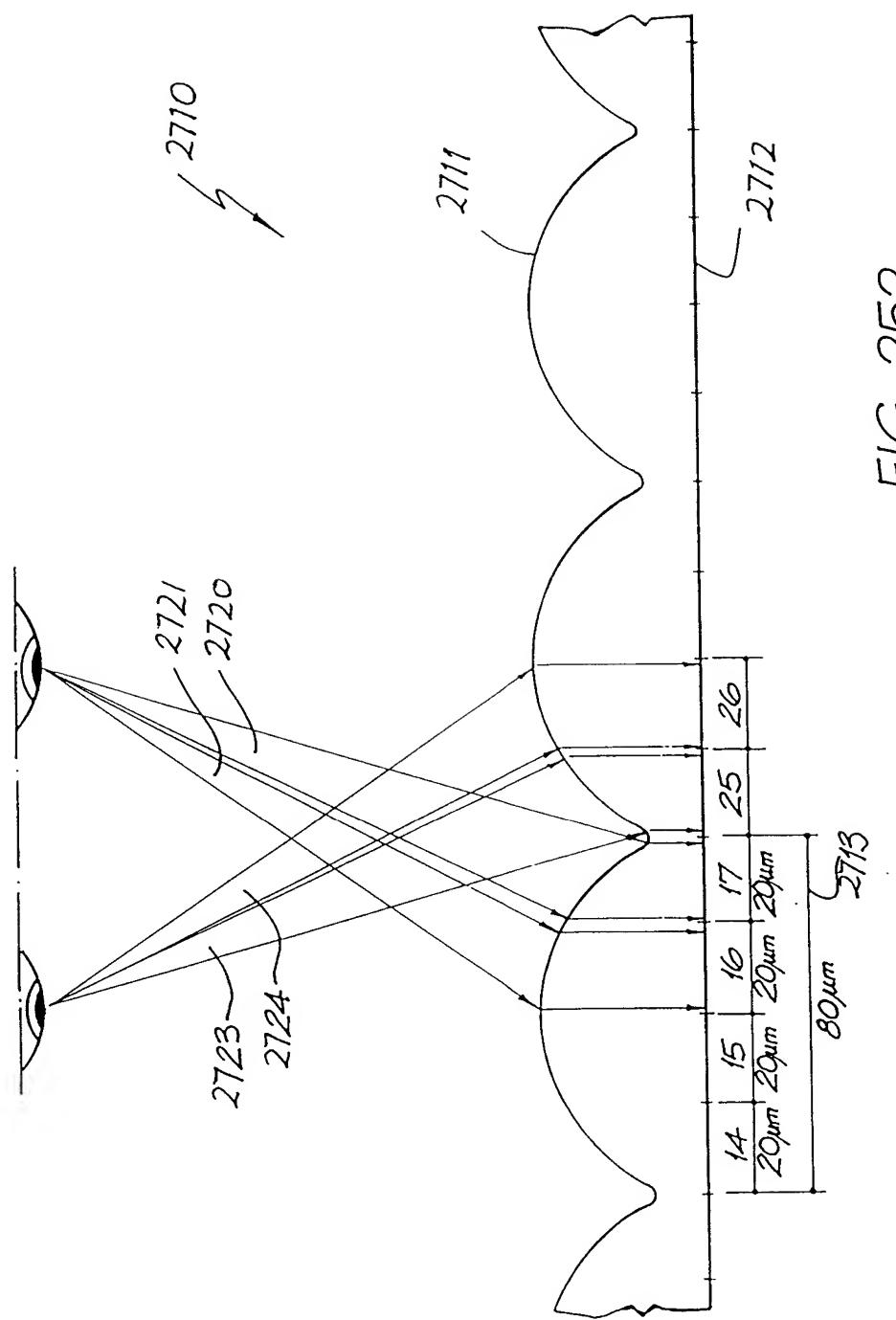


FIG. 251

170 / 246



171 / 246

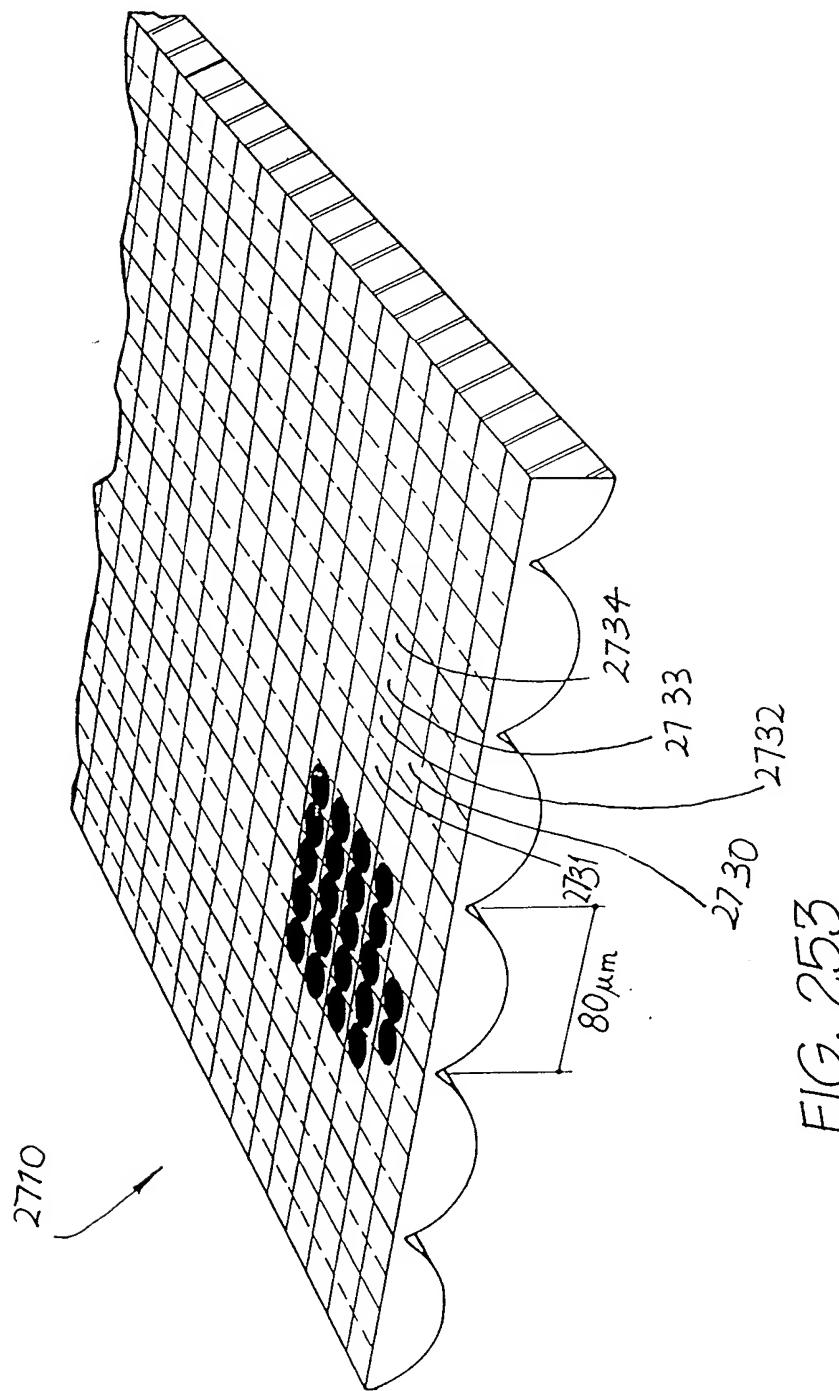


FIG. 253

172 / 246

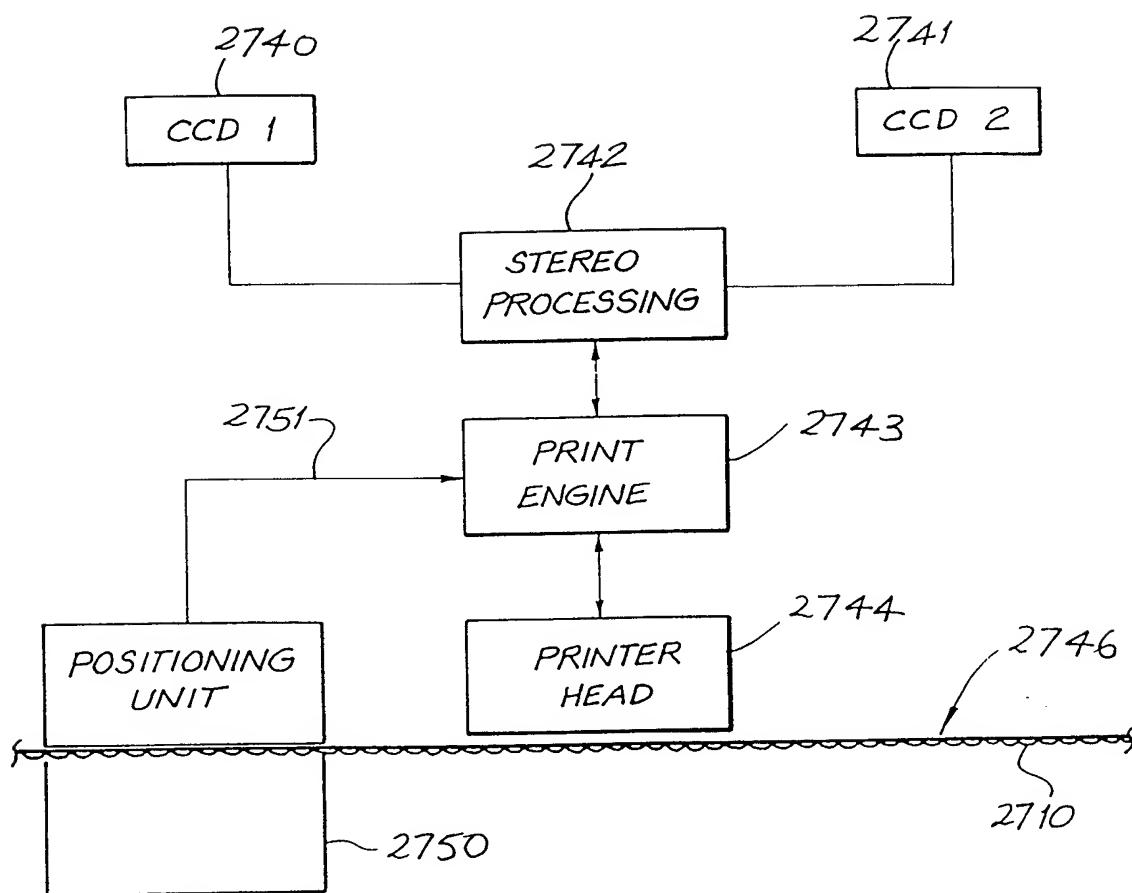


FIG. 254

173 / 246

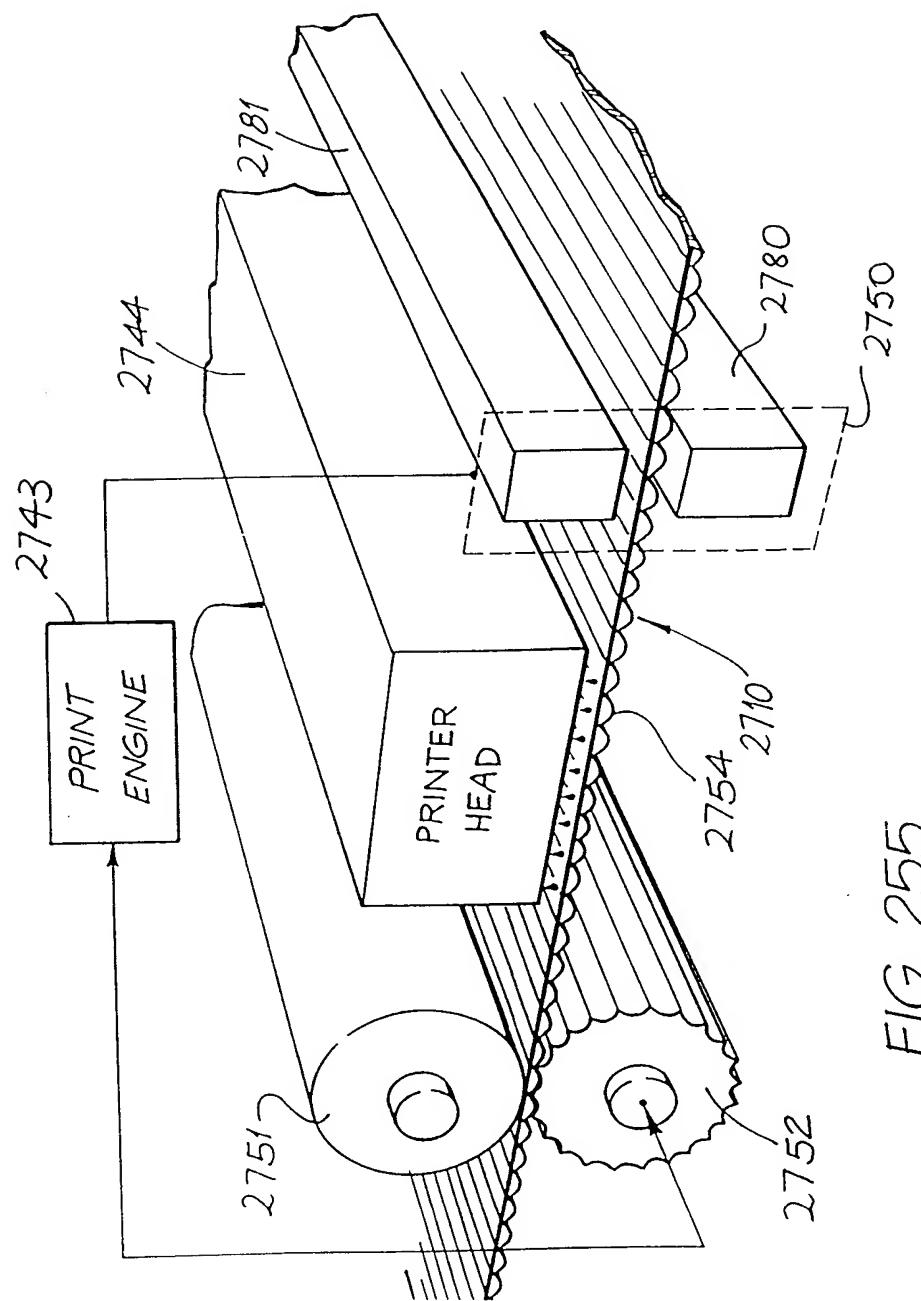


FIG. 255

174 / 246

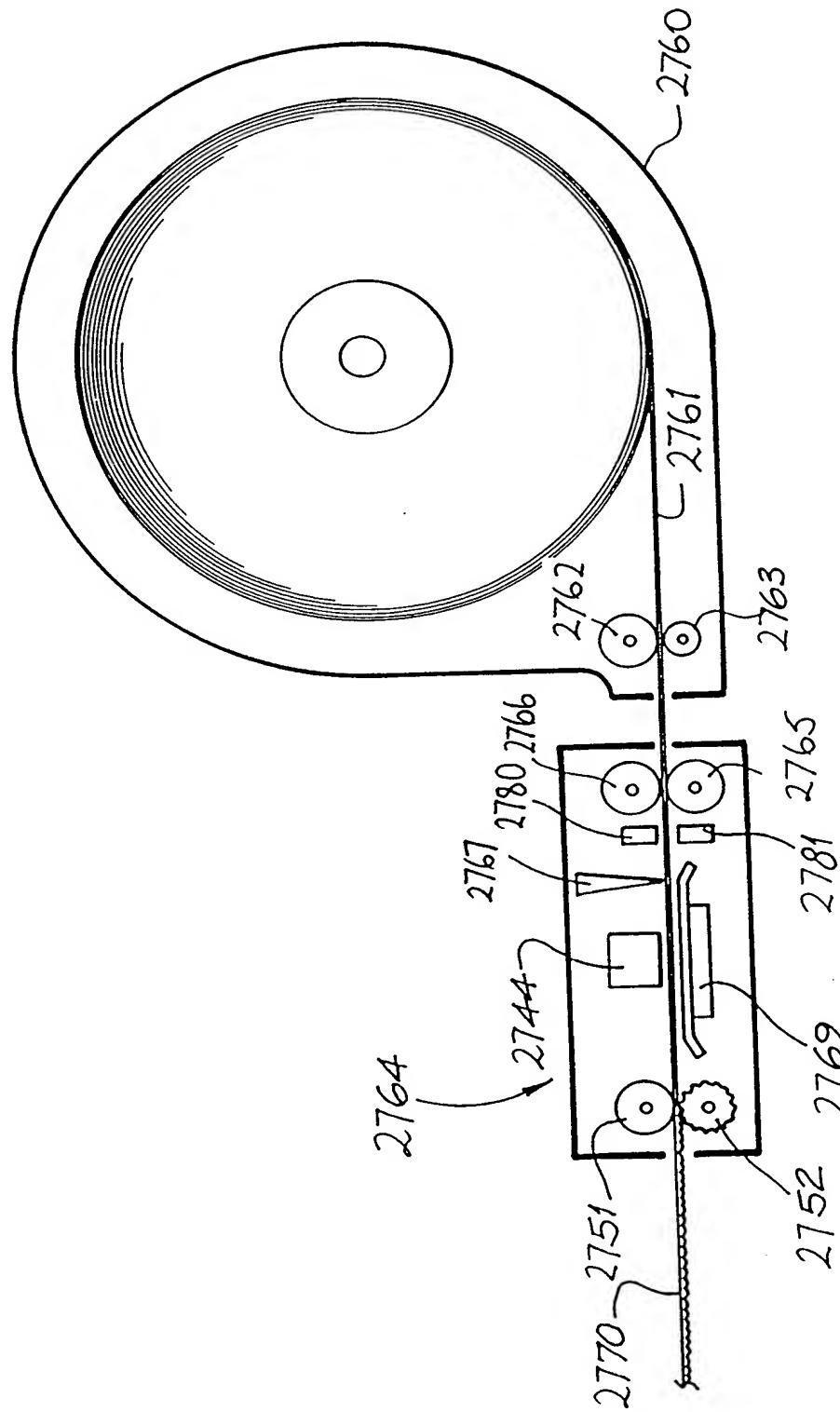


FIG. 256

175 / 246

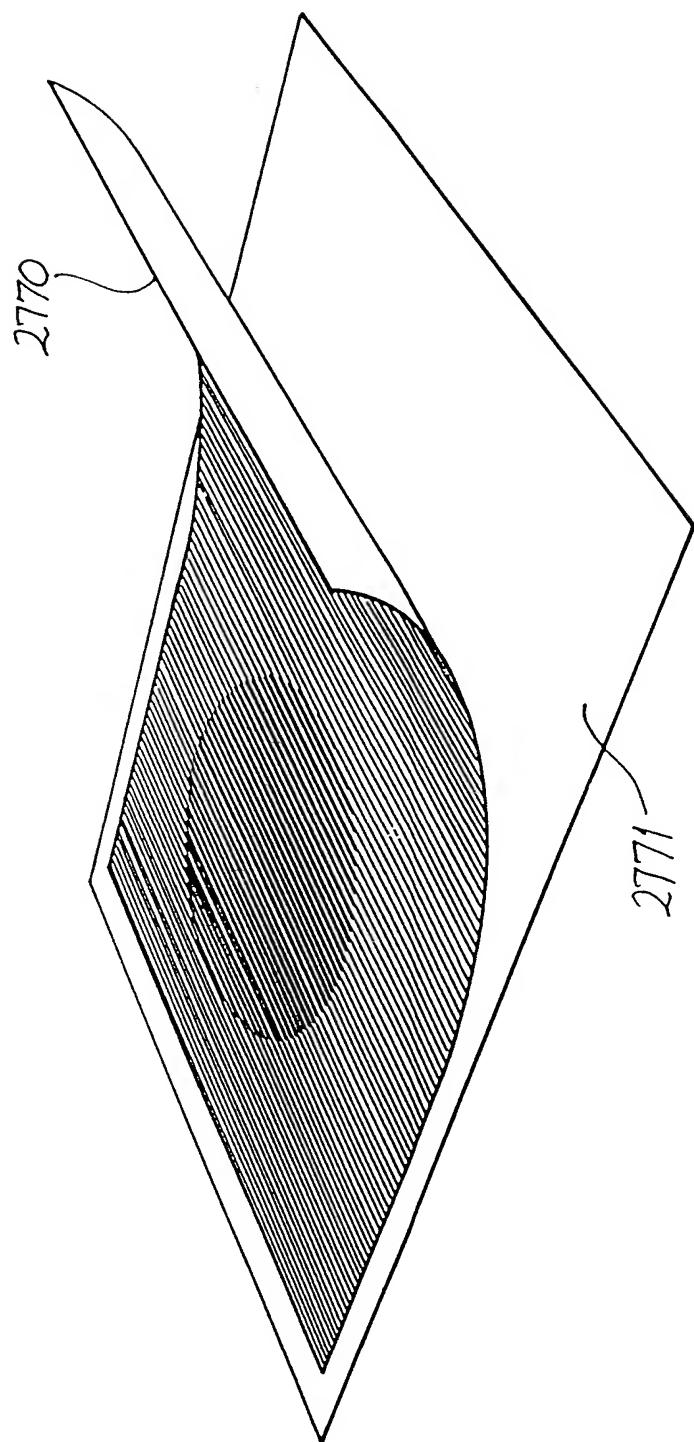


FIG. 257

176 / 246

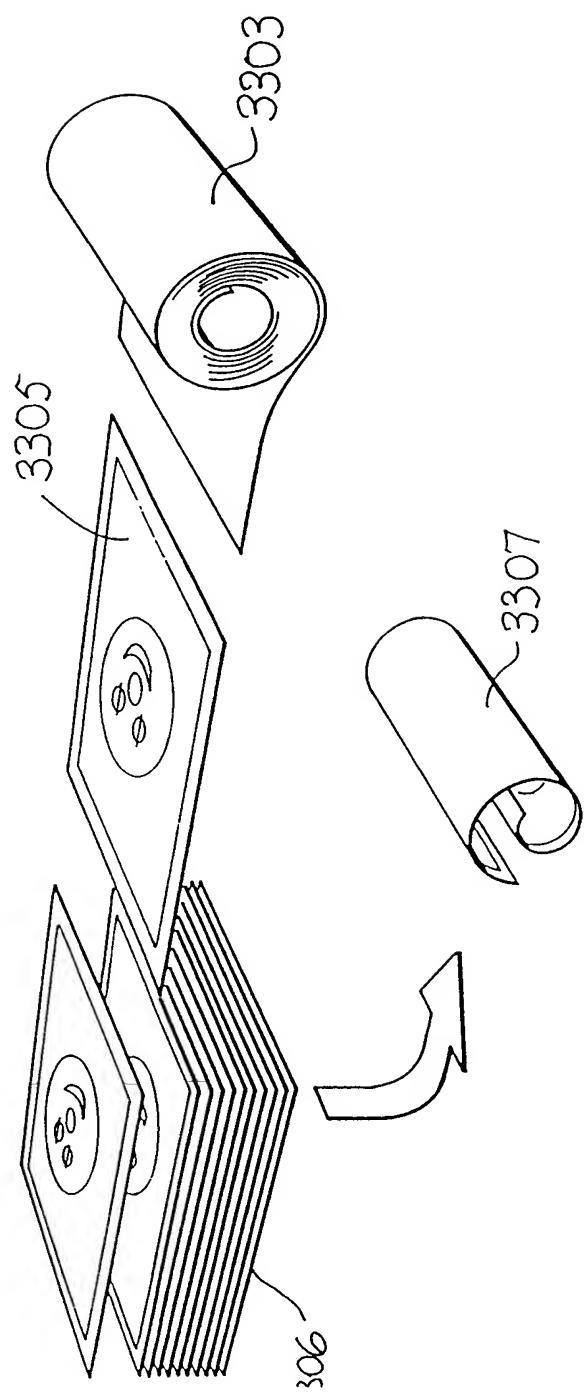
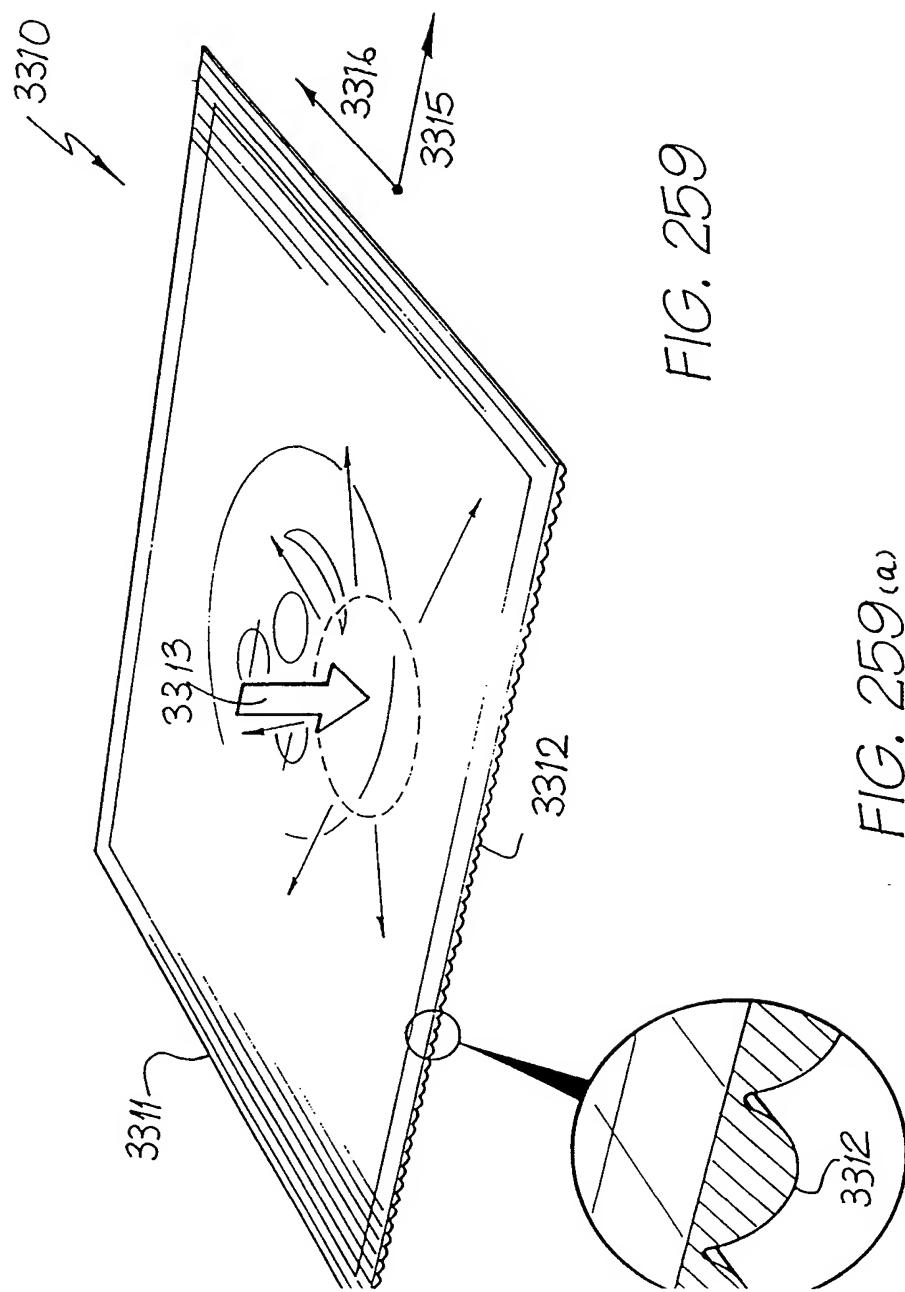


FIG. 258

177 / 246



178 / 246

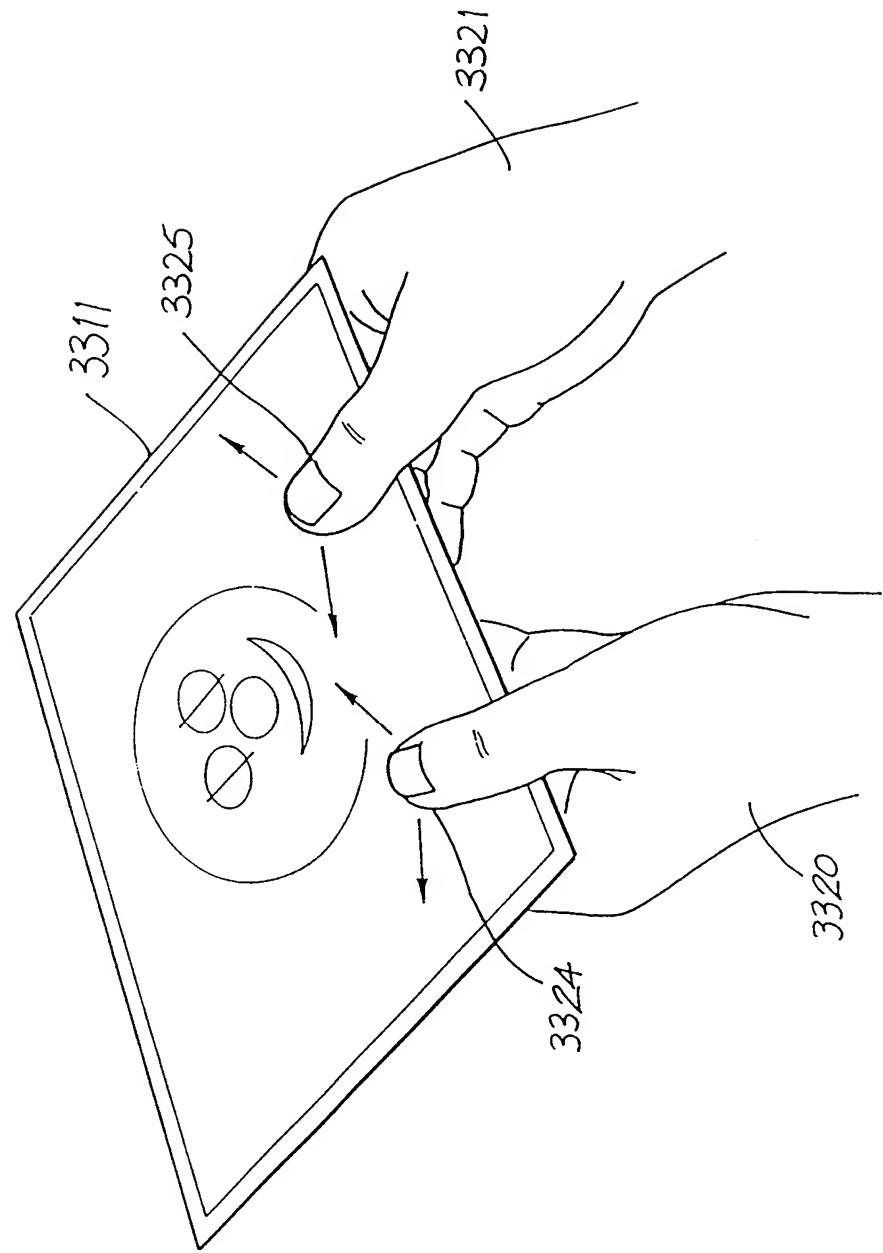
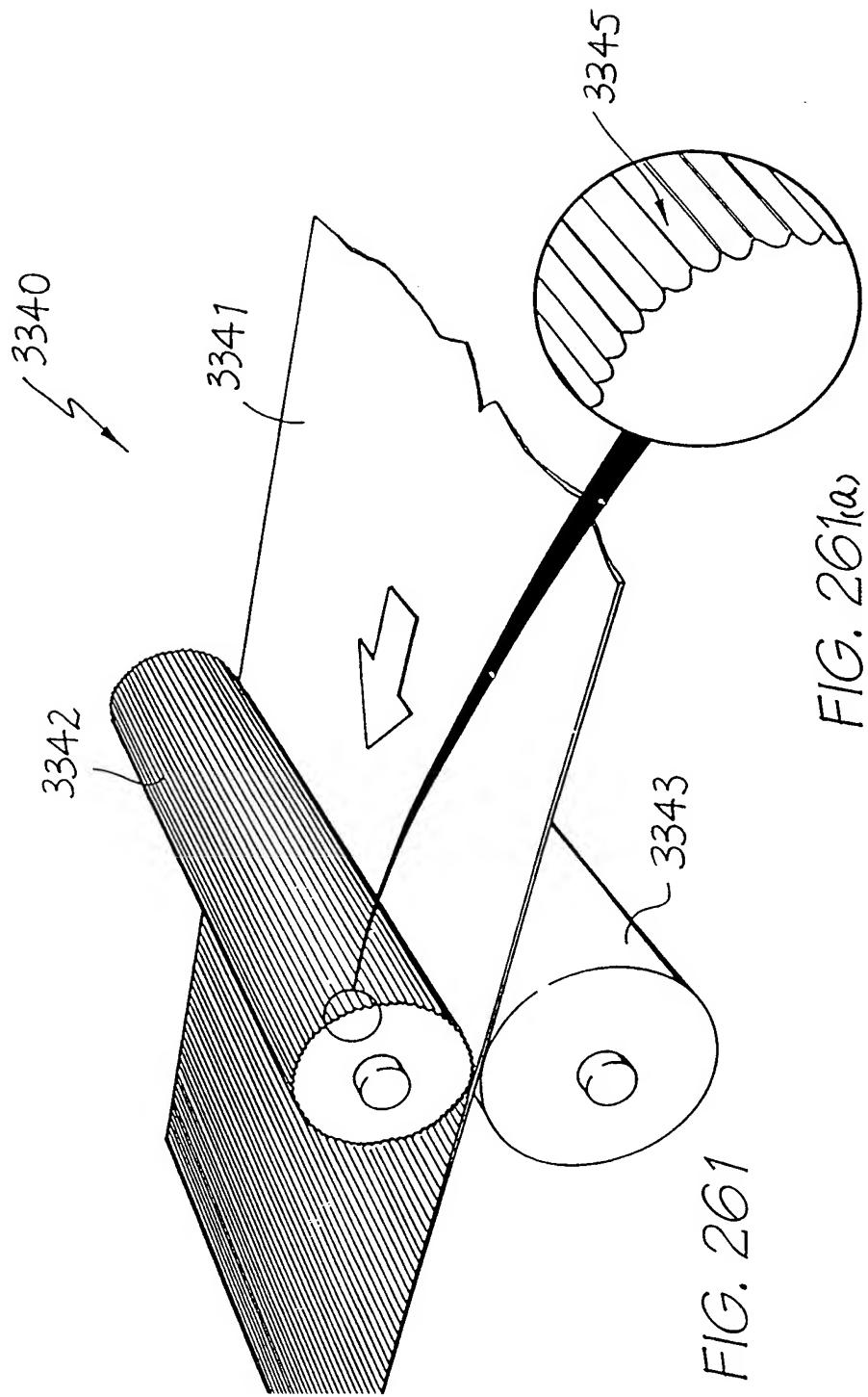


FIG. 260

179 / 246



180 / 246

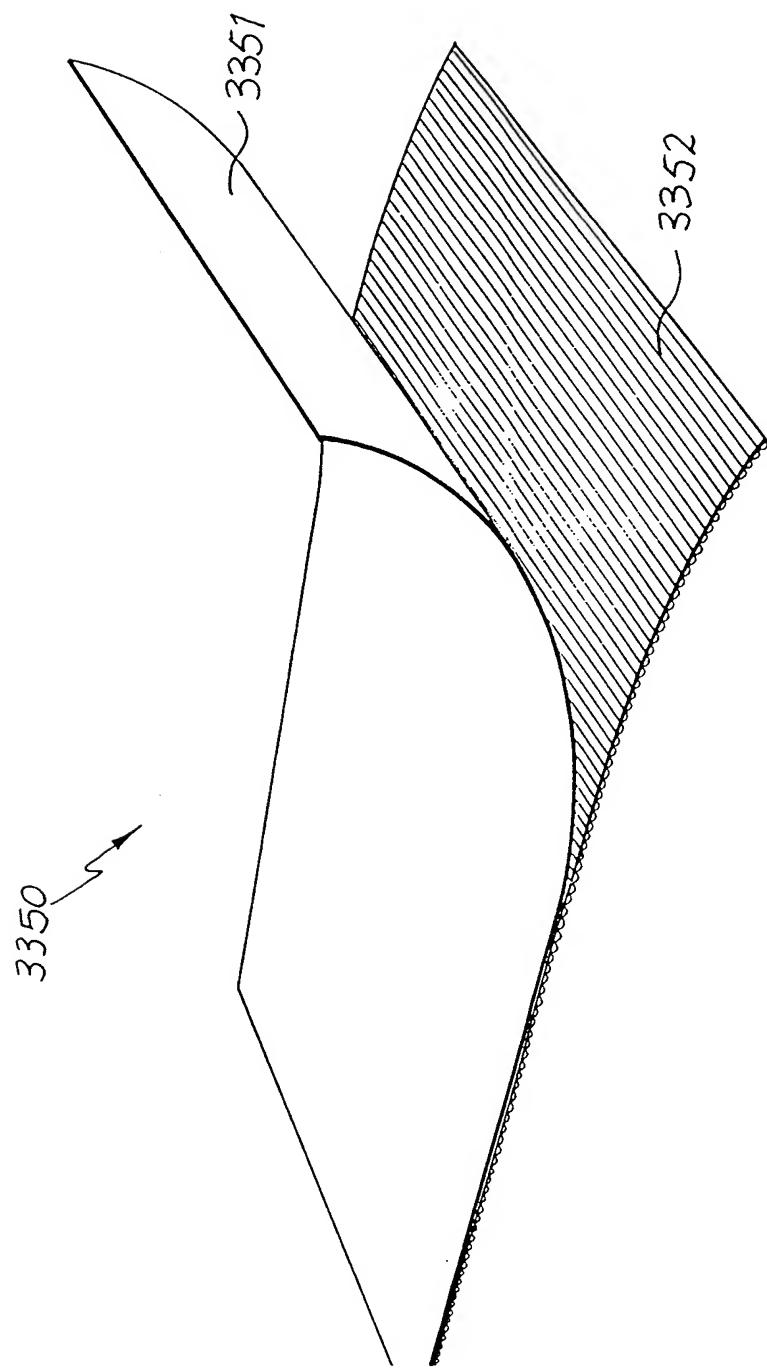
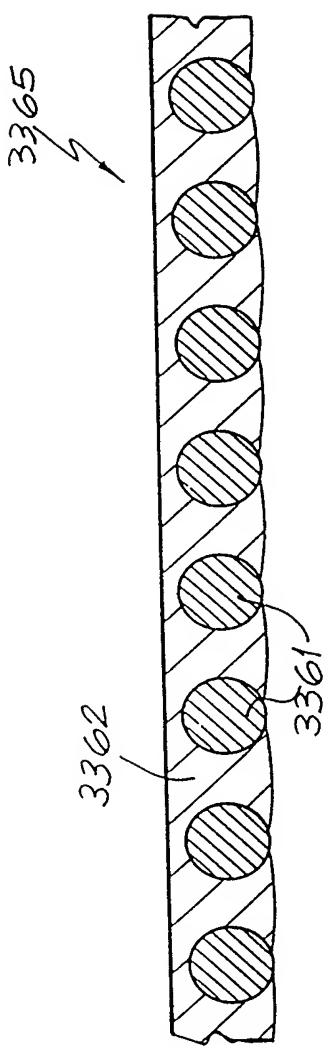
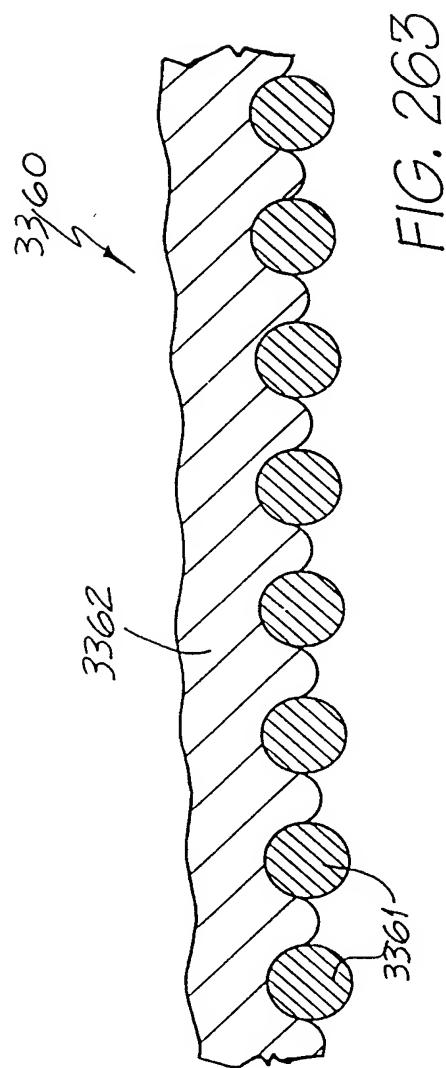


FIG. 262

181 / 246



182 / 246

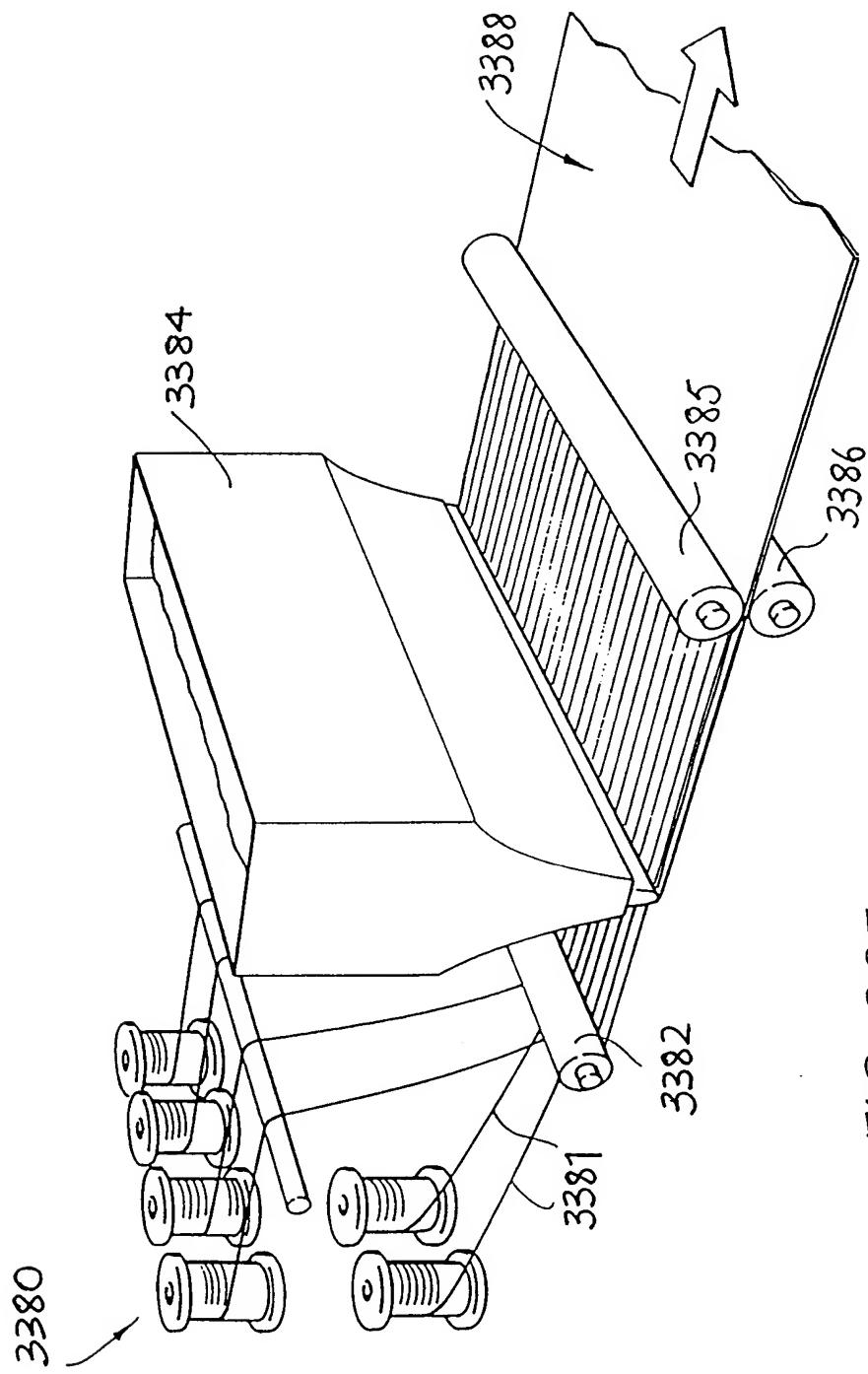


FIG. 265

183 / 246

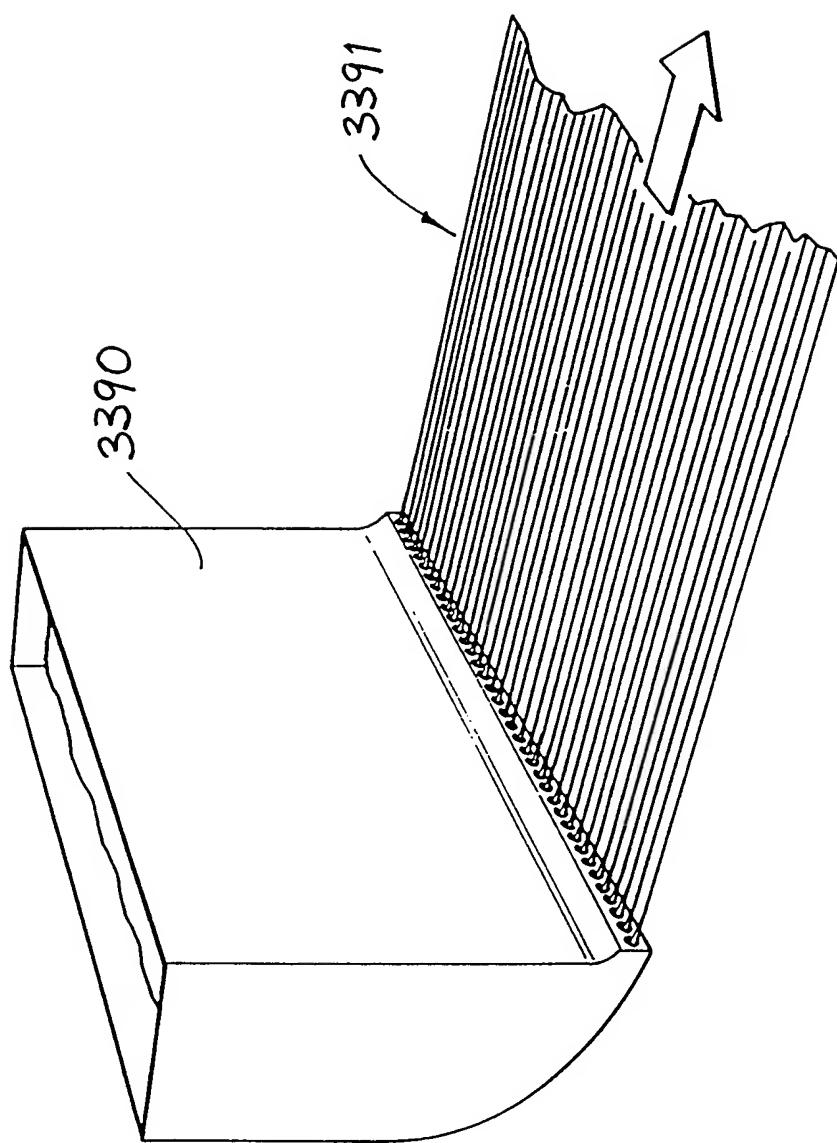


FIG. 266

184 / 246

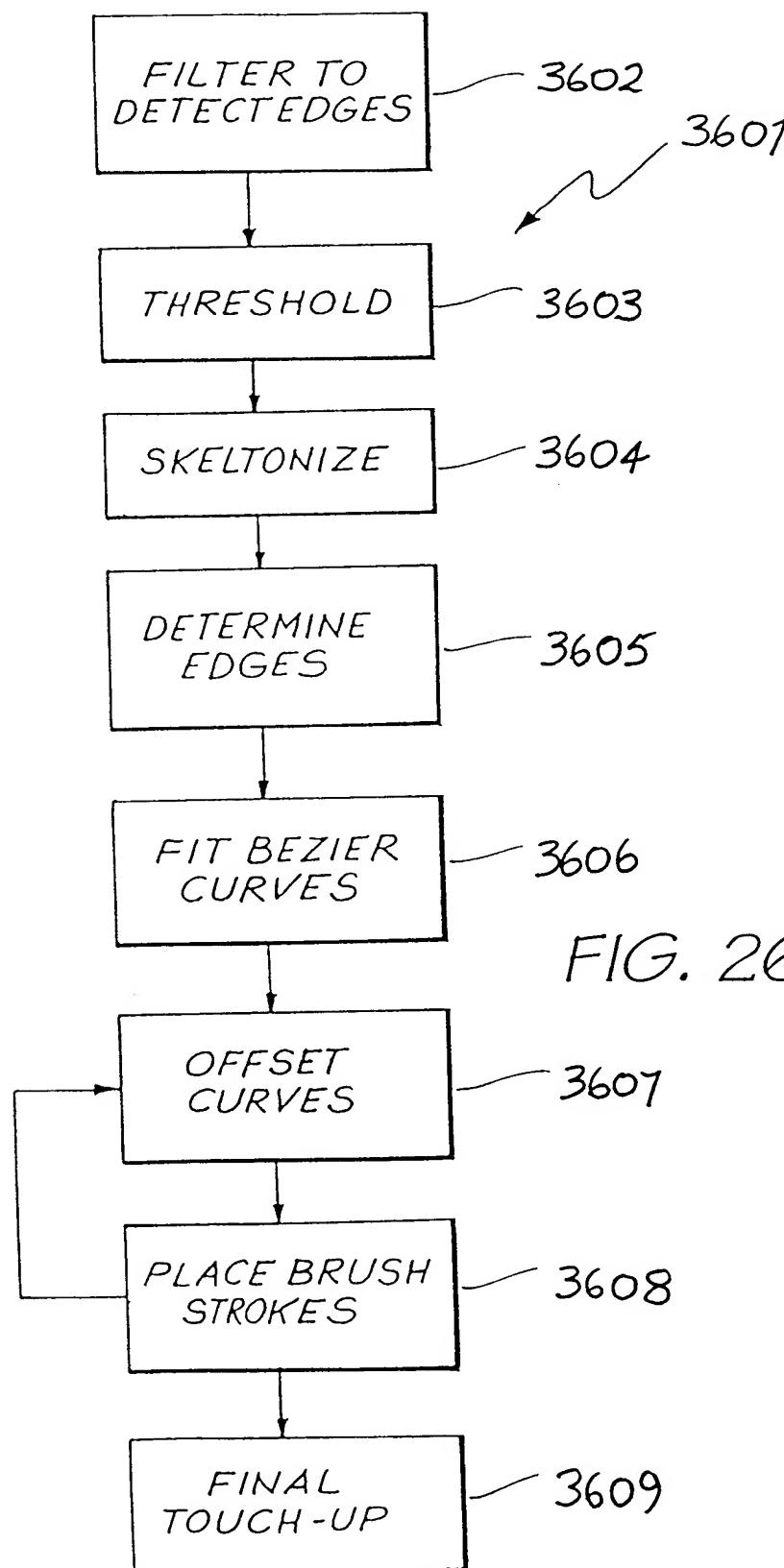


FIG. 267

185 / 246

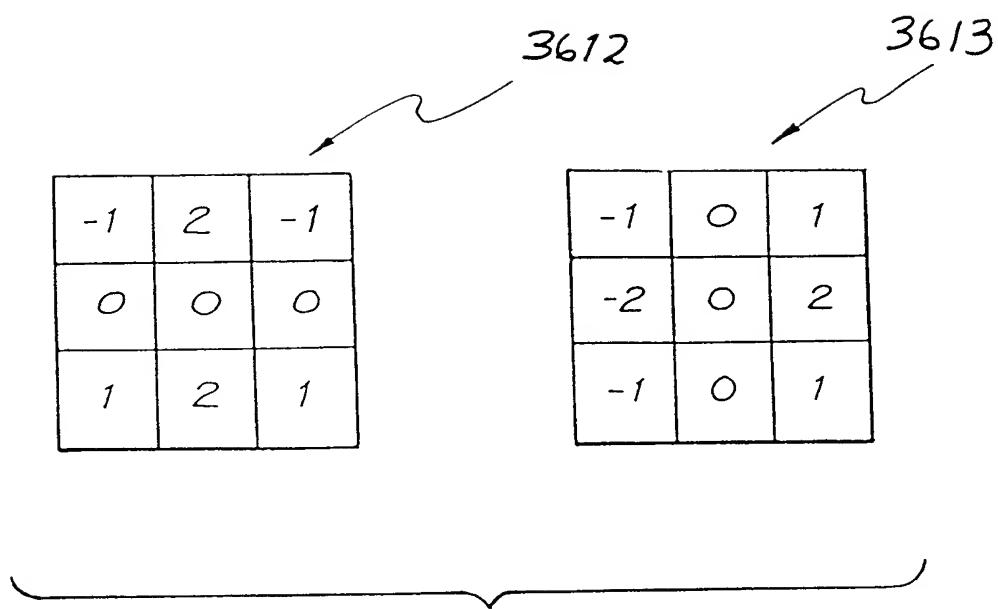
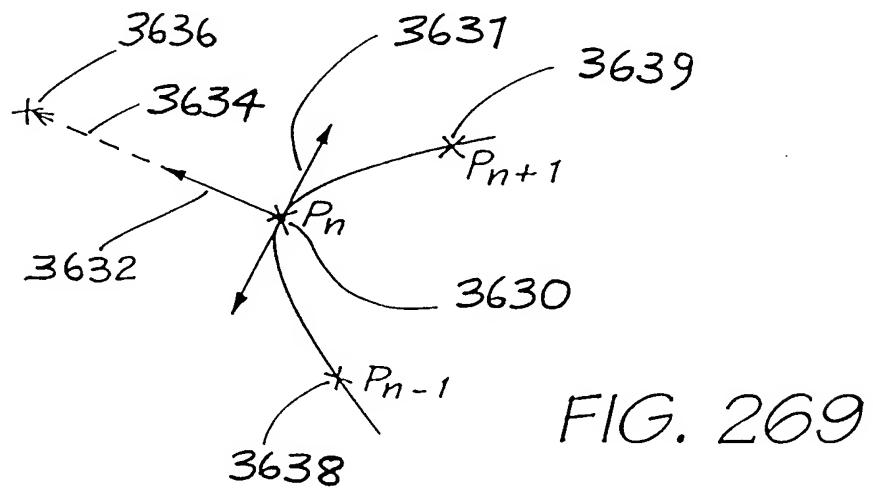
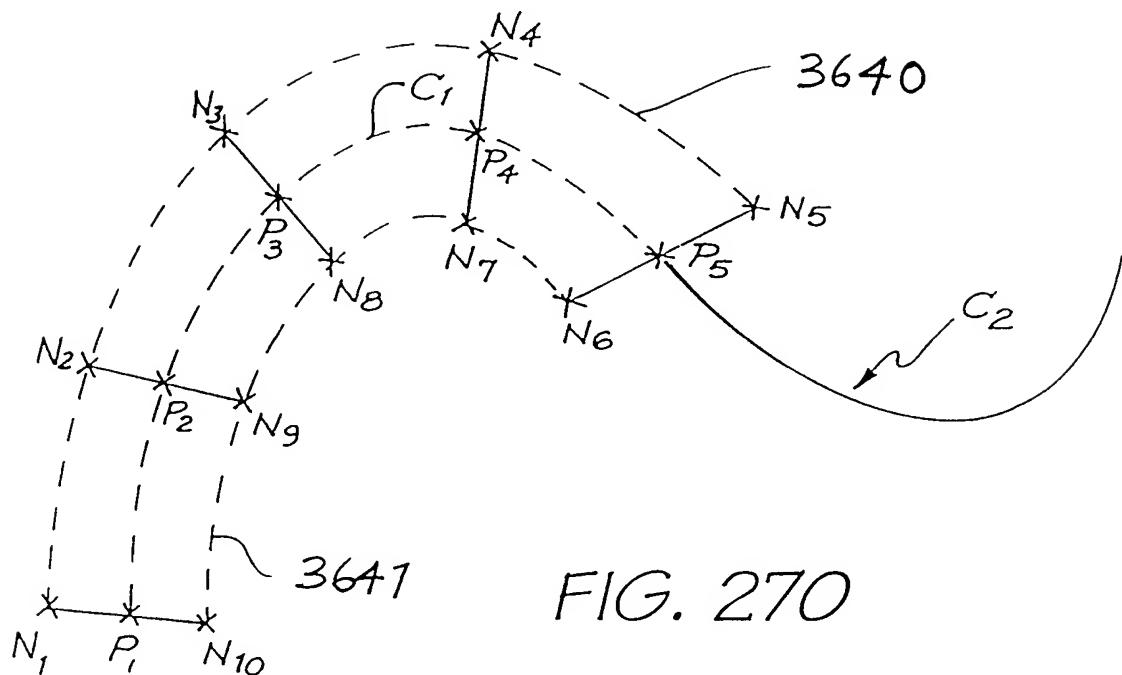


FIG. 268

186 / 246



187 / 246



FIG. 271

188 / 246

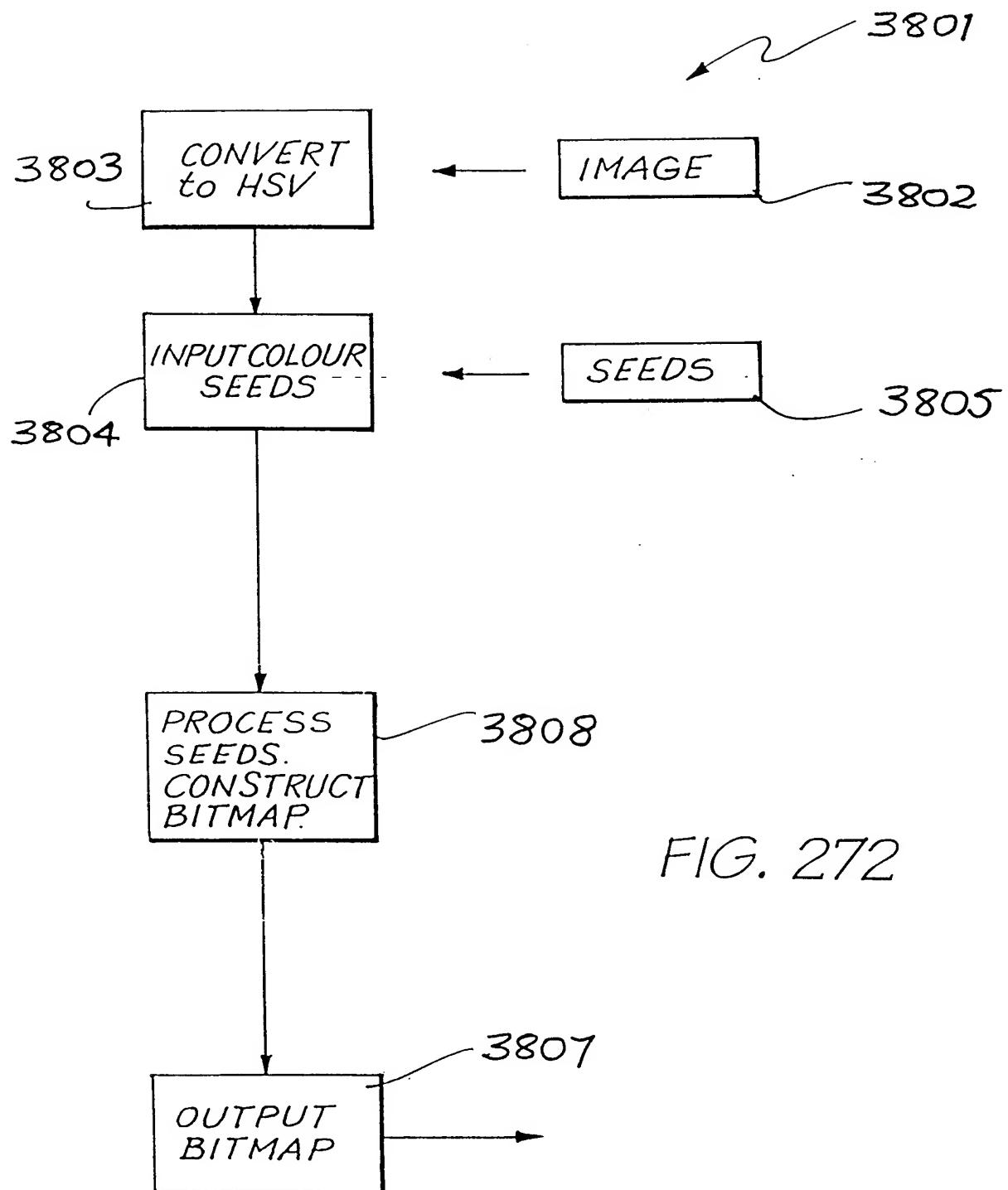


FIG. 272

189 / 246

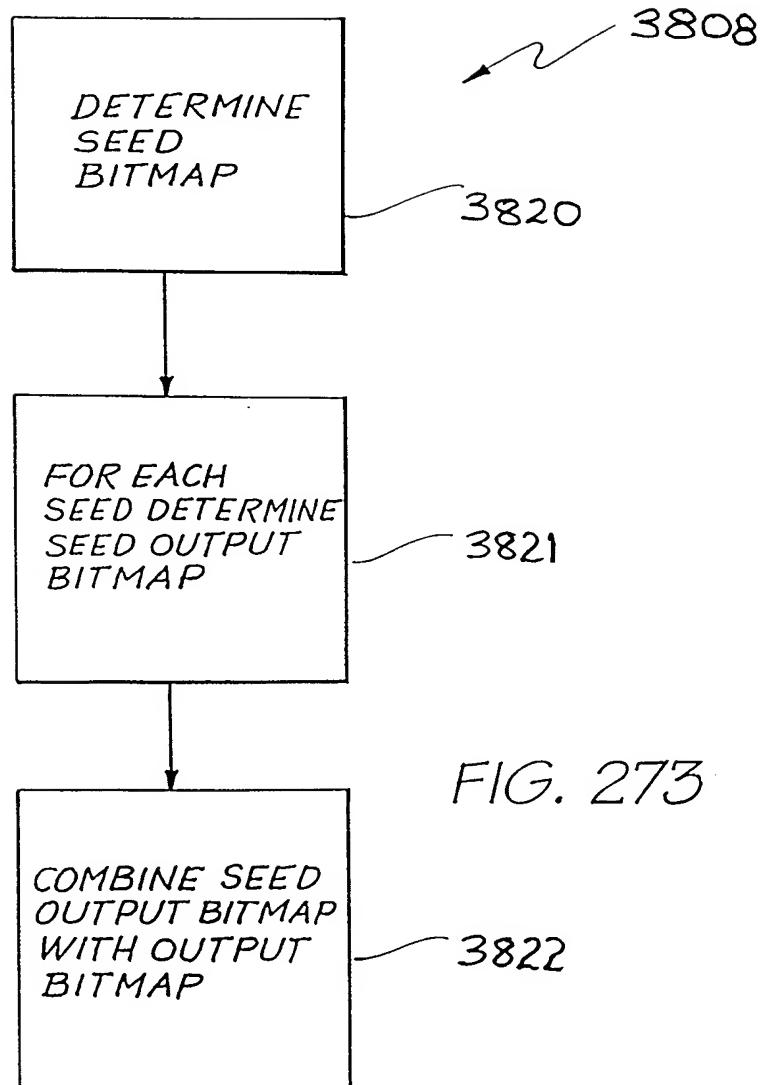


FIG. 273

190 / 246

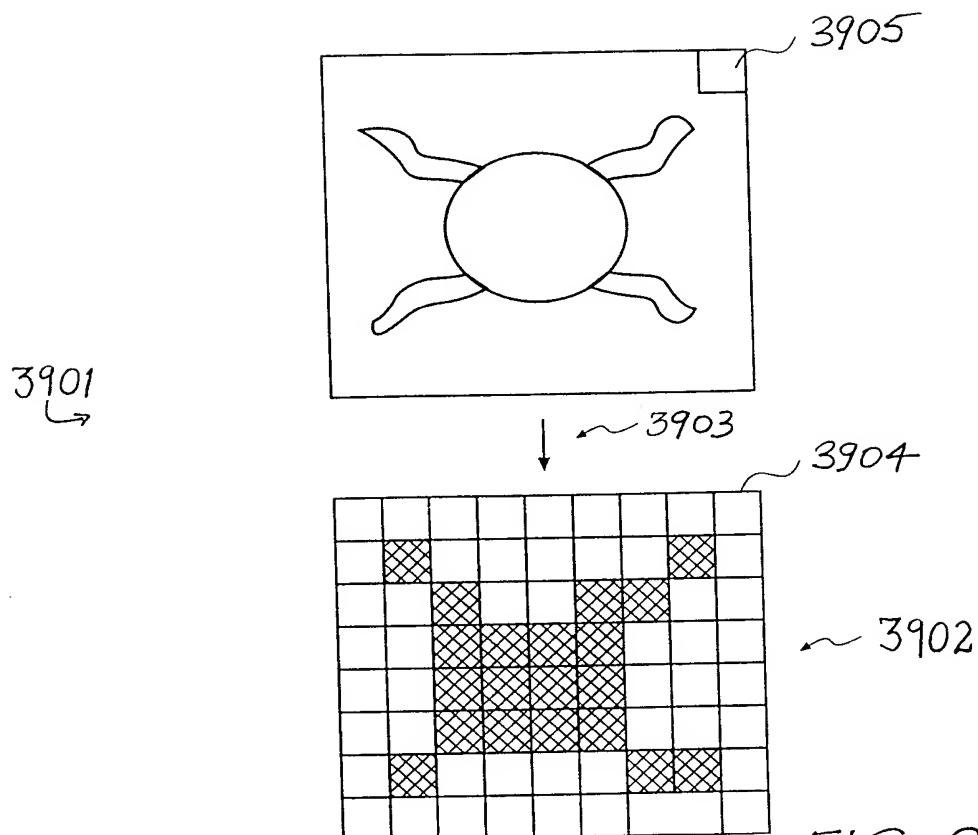


FIG. 274

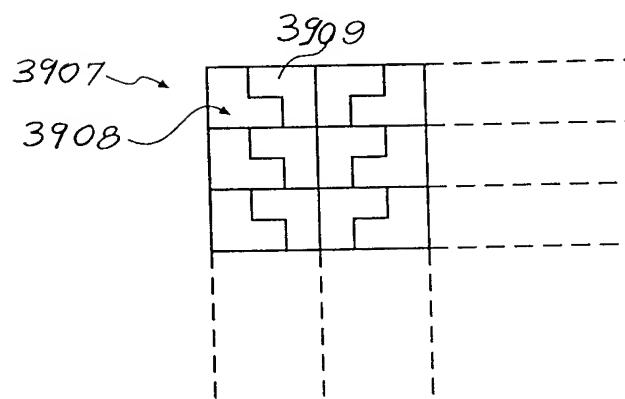


FIG. 275

191 / 246

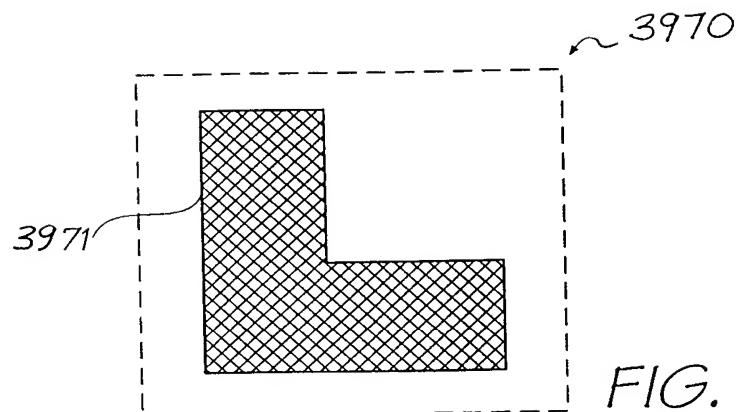


FIG. 276

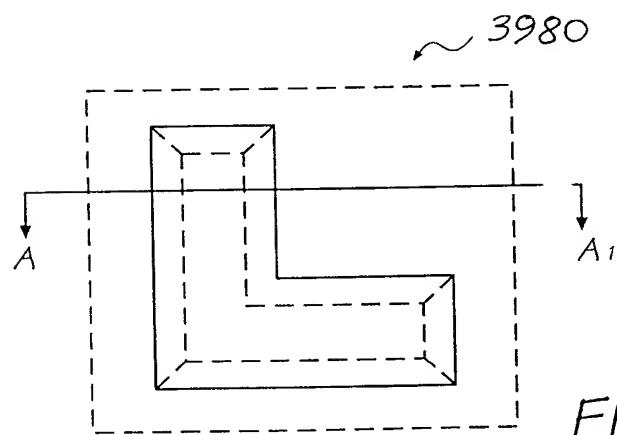


FIG. 277

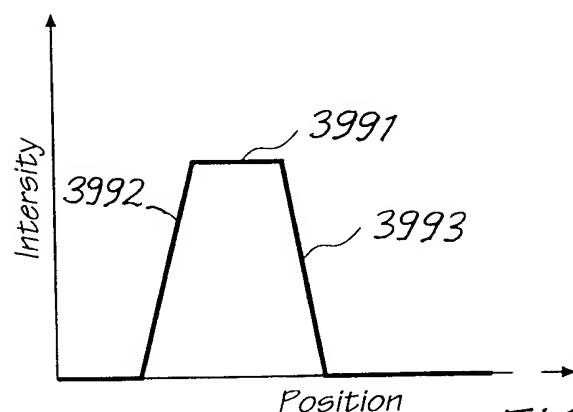


FIG. 278

192 / 246

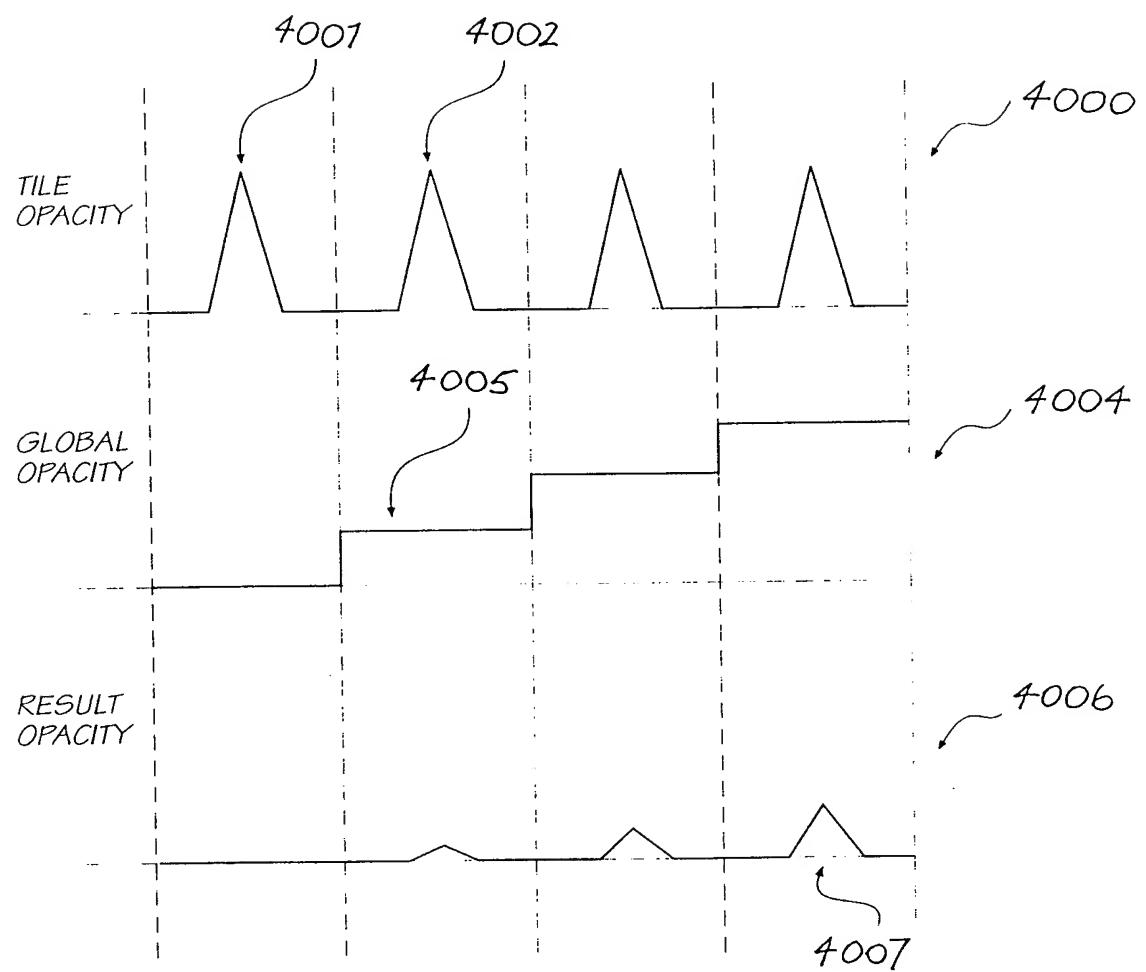
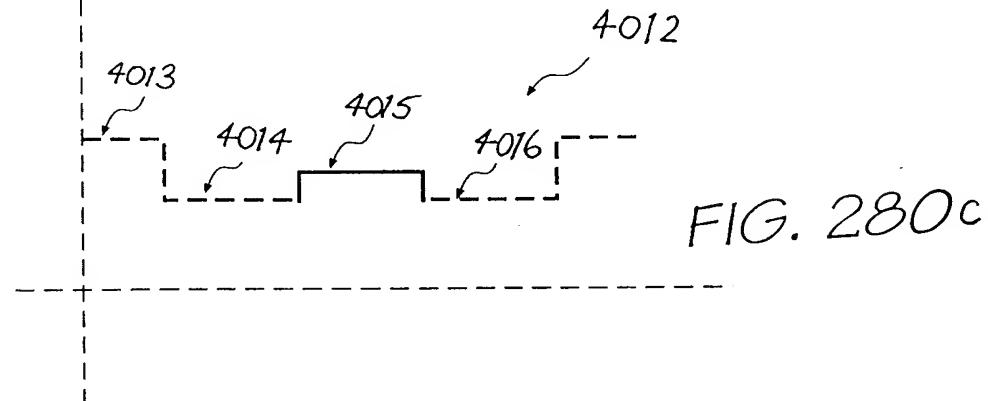
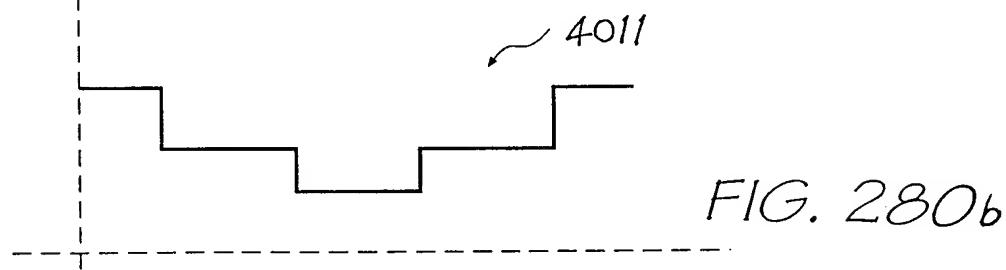
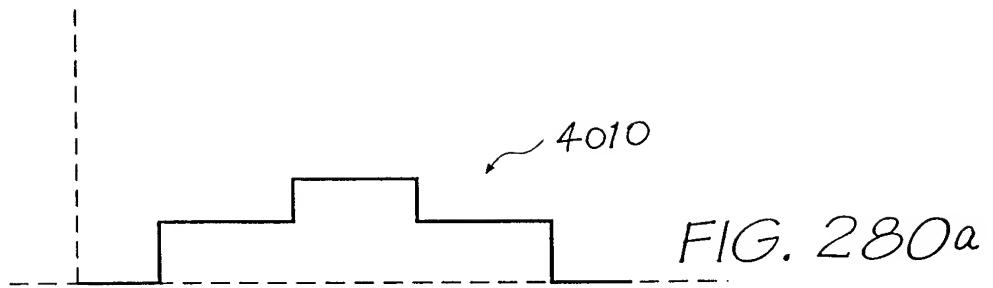


FIG. 279

193 / 246



194 / 246

4025



BRUSH STROKE	PAINT COLOR	STROKE COLOR
$B_1$	$C_1$ $C_2$ $C_3$ $C_4$	$S_1$ $S_2$ $S_3$ $S_4$
$B_2$	$C_1$ $C_2$ $C_3$ $C_4$	$S_1$ $S_2$ $S_3$ $S_4$
$B_3$	$C_1$ $C_2$ $C_3$ $C_4$	$S_1$ $S_2$ $S_3$ $S_4$
$B_4$	$C_1$ $C_2$ $C_3$	$S_1$ $S_2$ $S_3$
—	—	—
—	—	—
—	—	—
—	—	—

FIG. 281

195 / 246

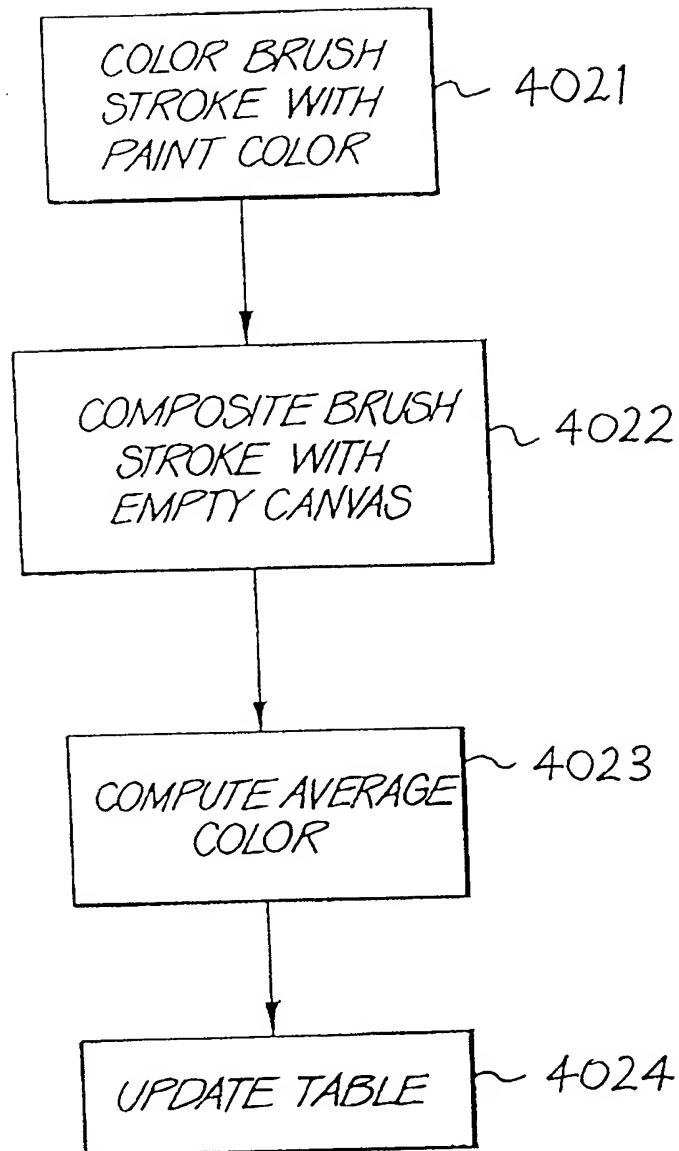


FIG. 282

196 / 246

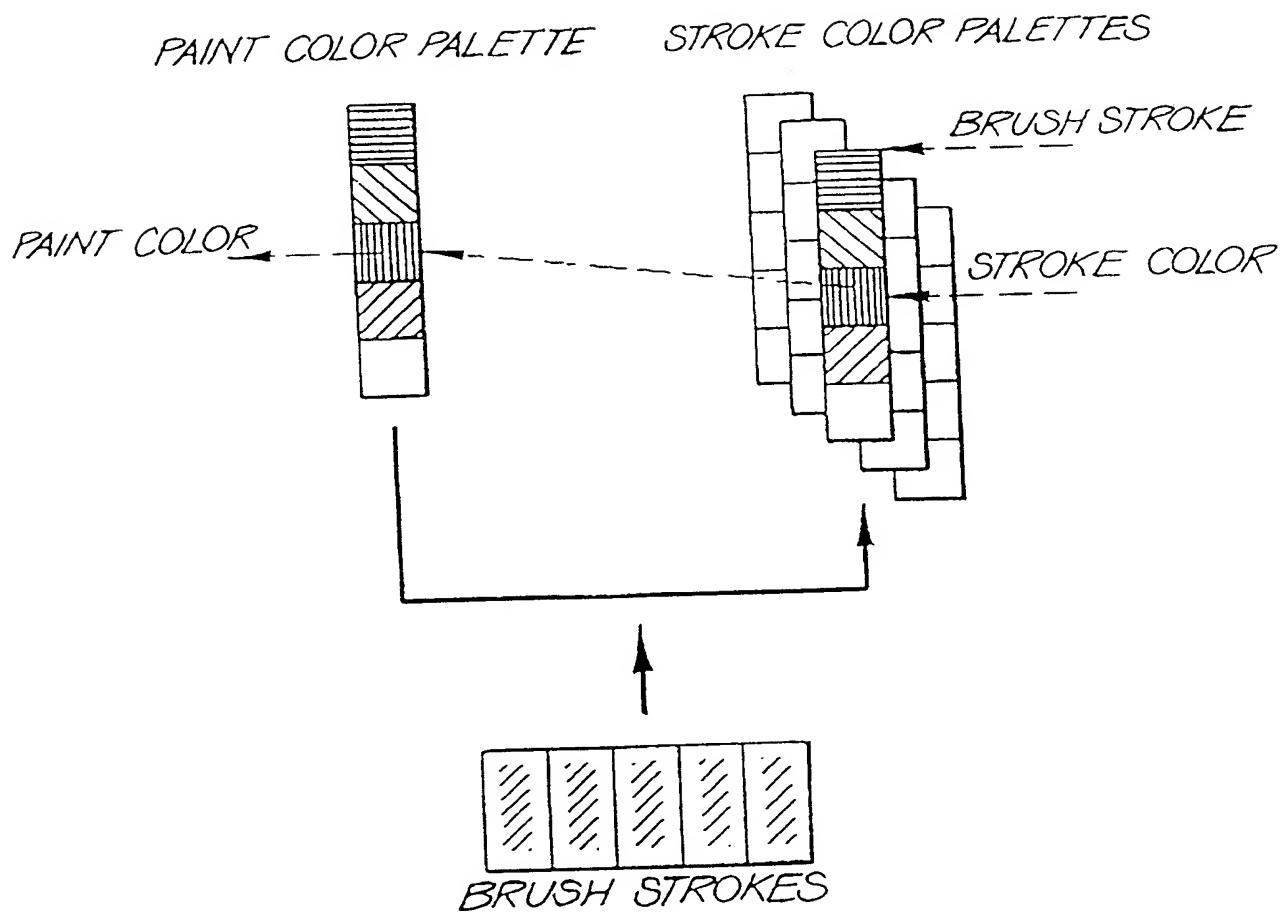


FIG. 283

197 / 246

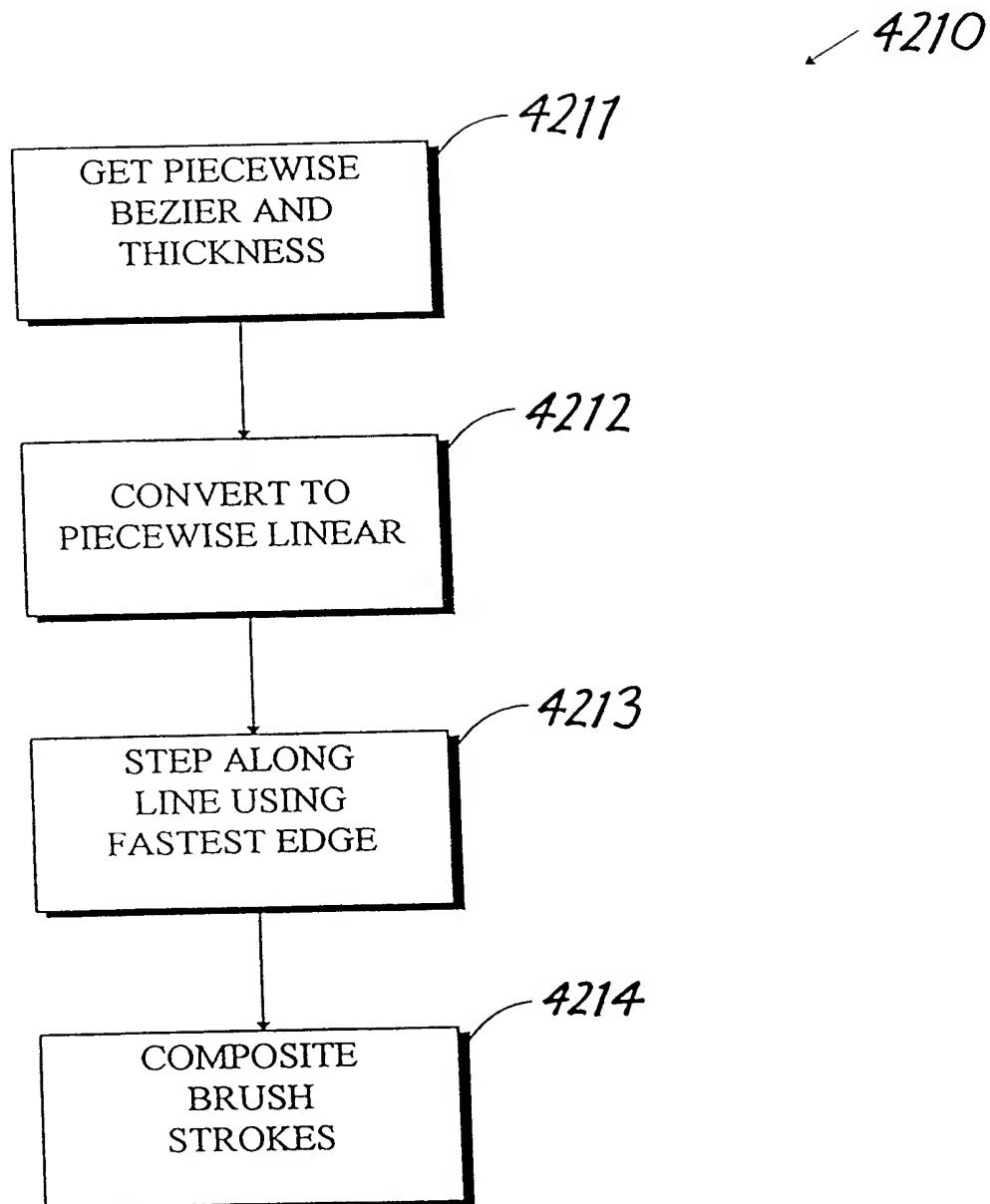


FIG. 284

198 / 246

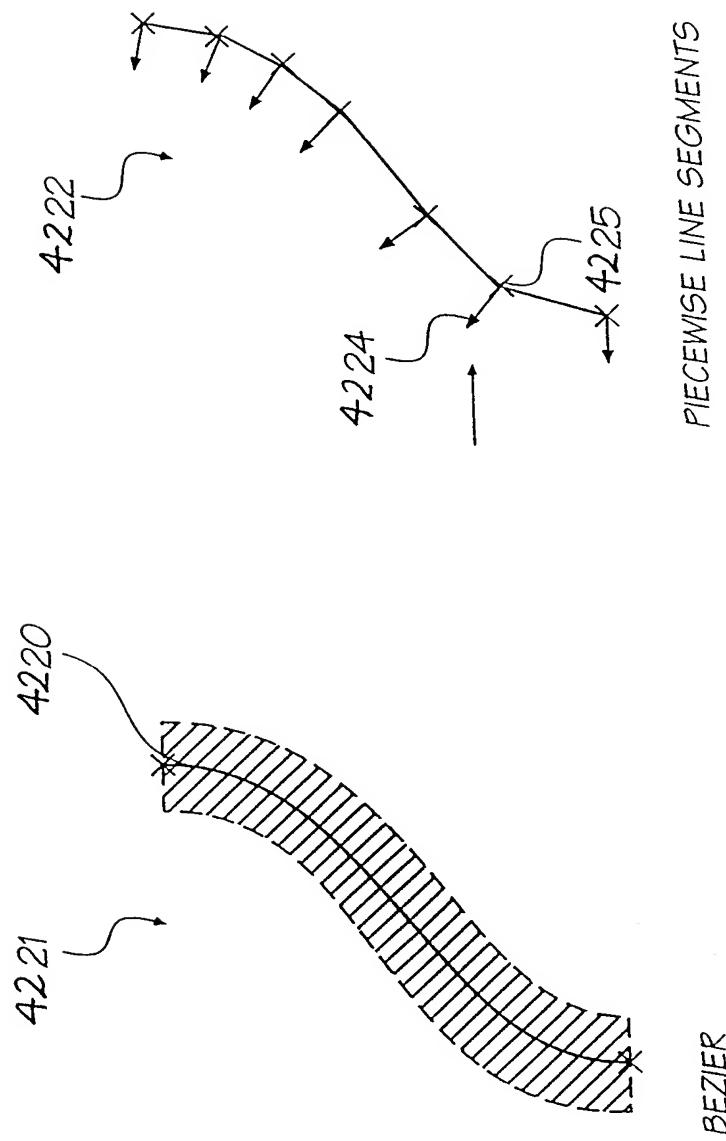


FIG. 285

199 / 246

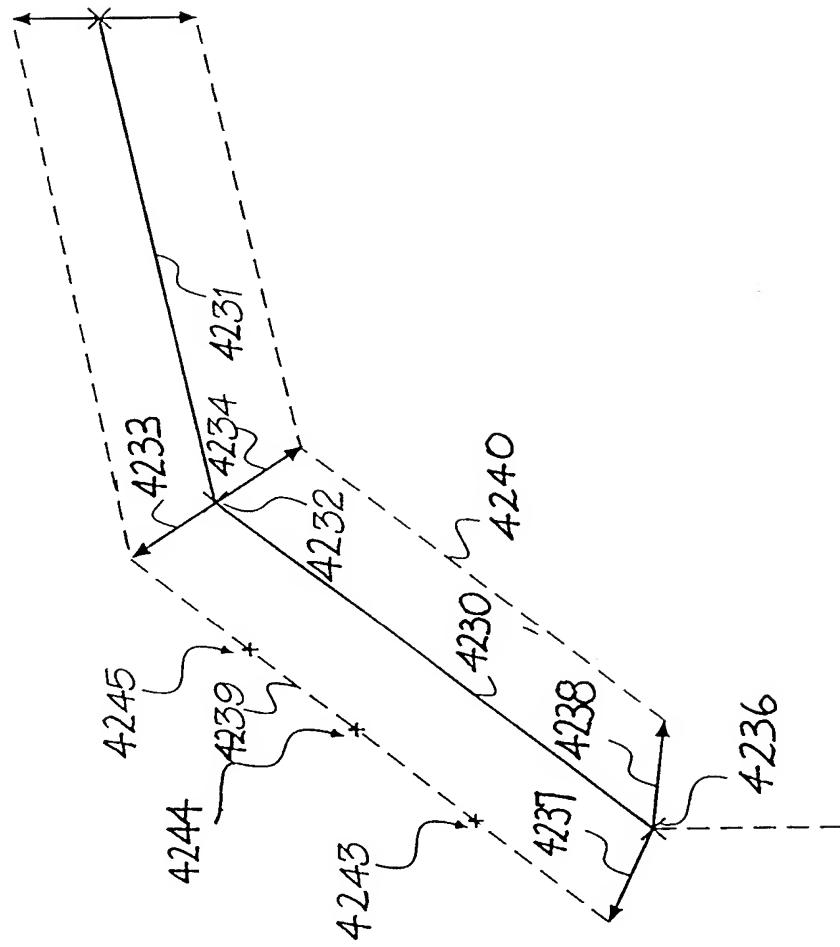


FIG. 286

200 / 246

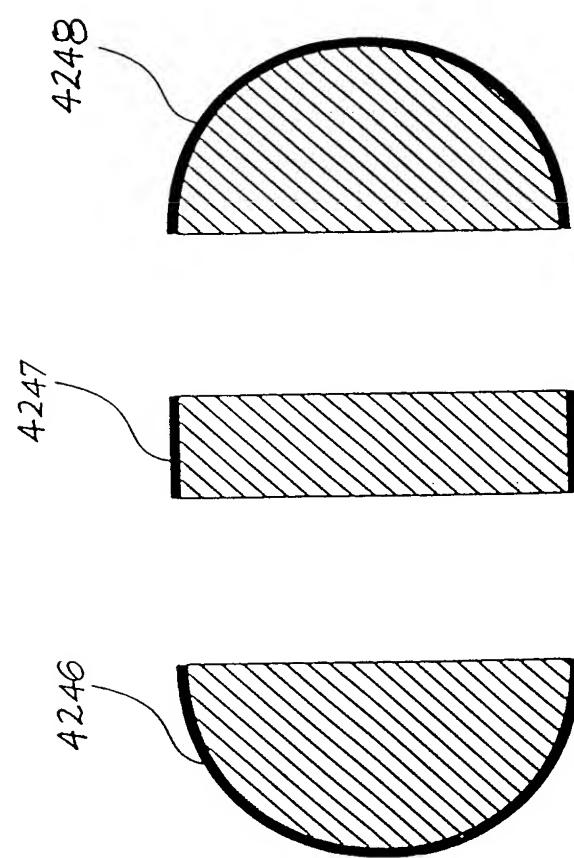


FIG. 287

201 / 246

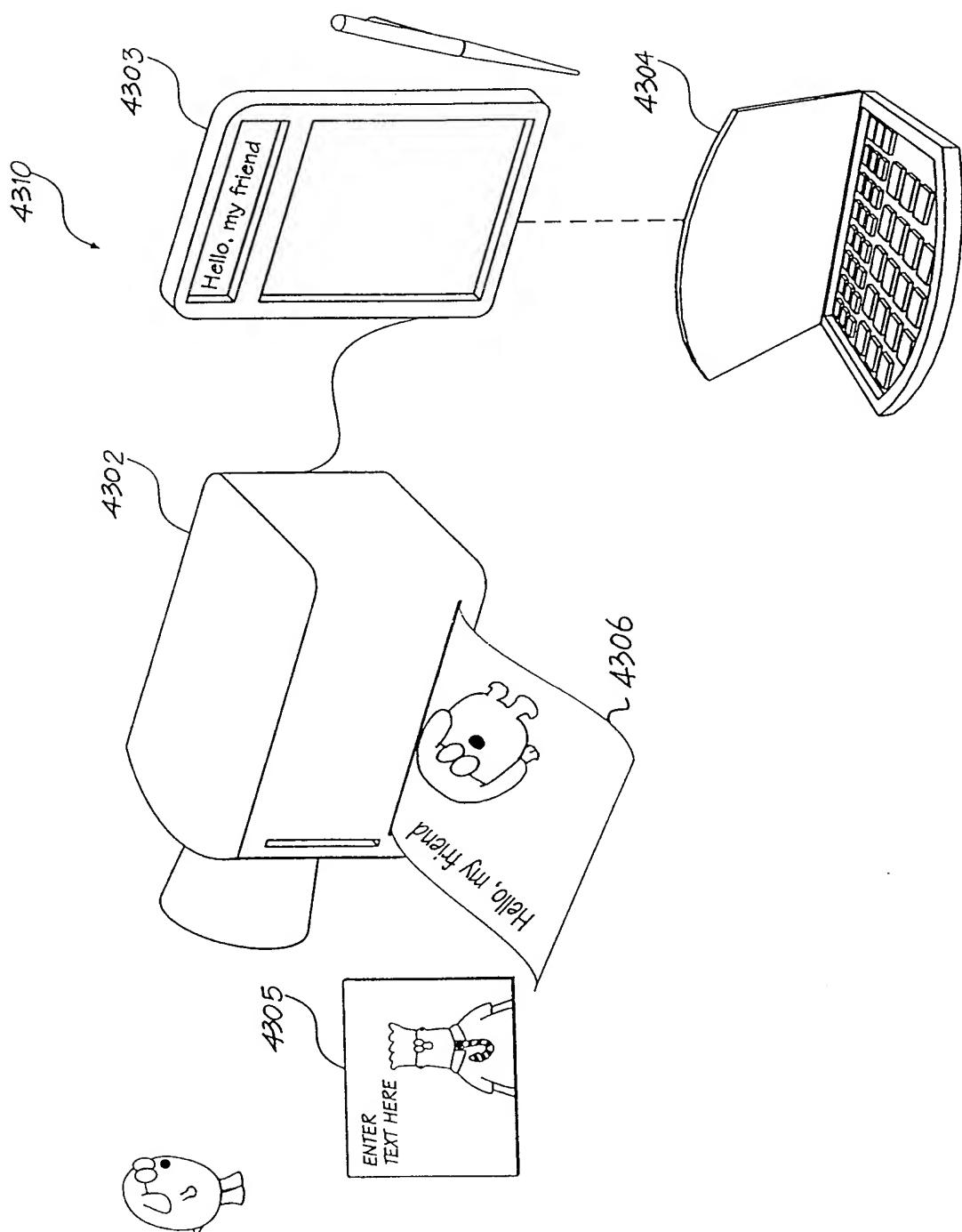


FIG. 288

202 / 246

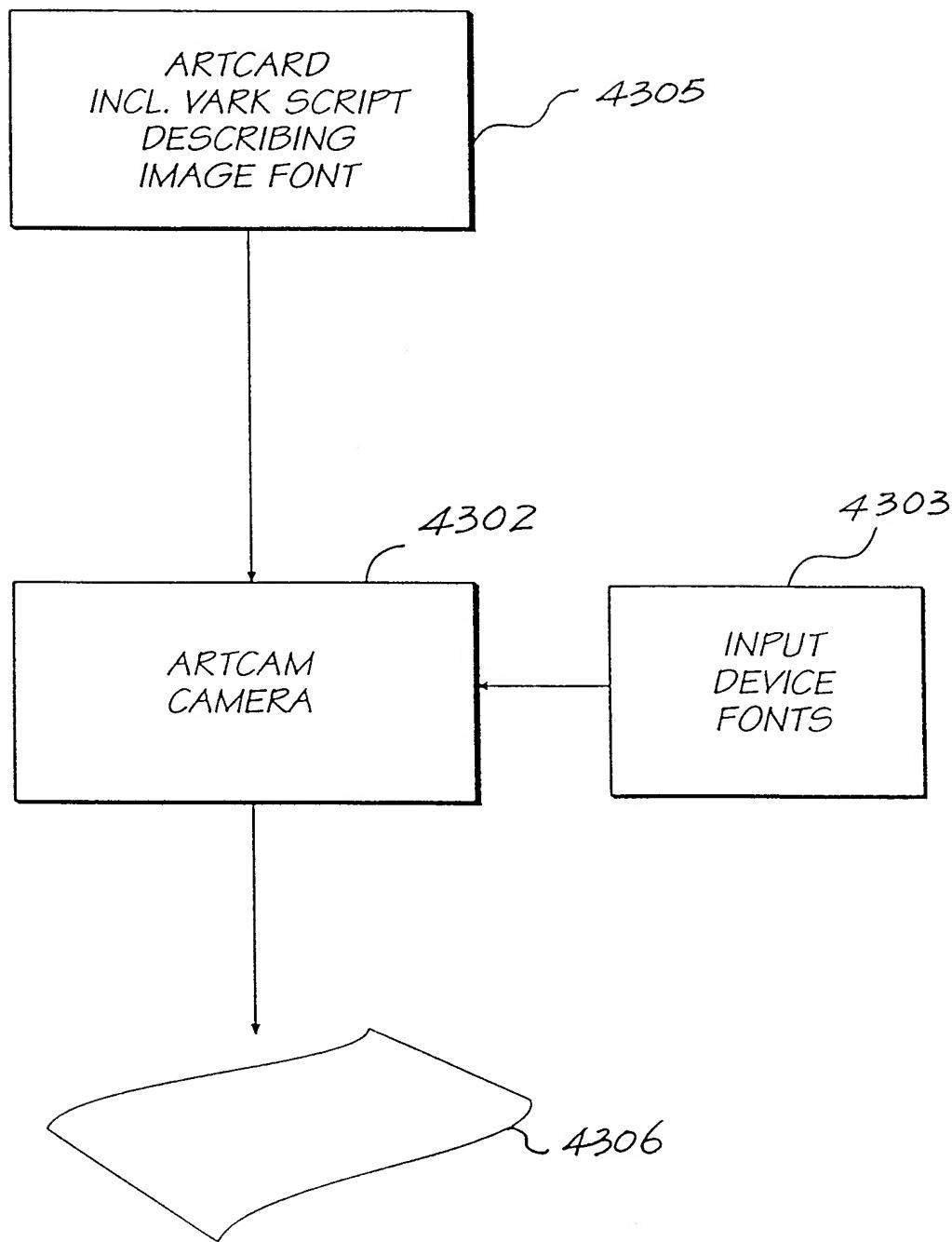


FIG. 289

203 / 246

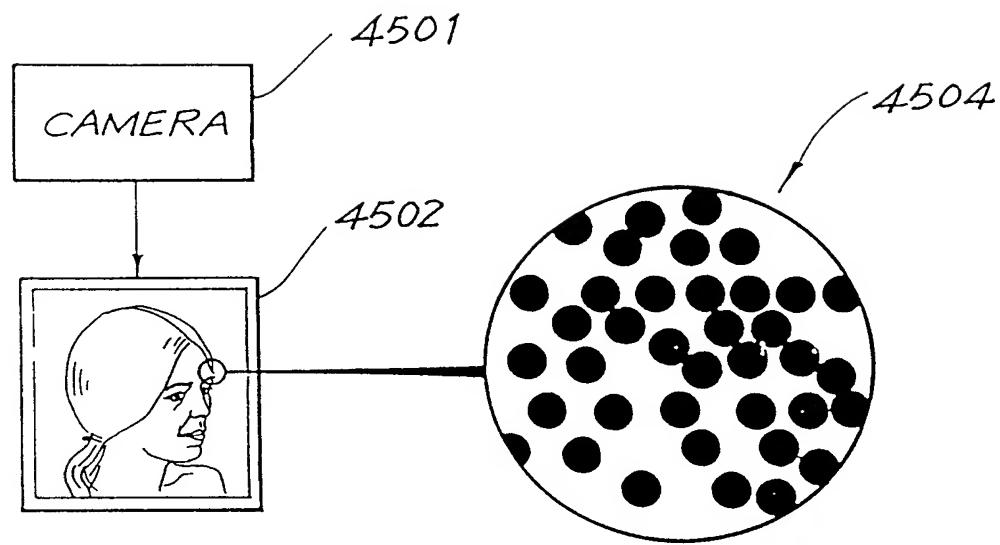


FIG. 290

204 / 246

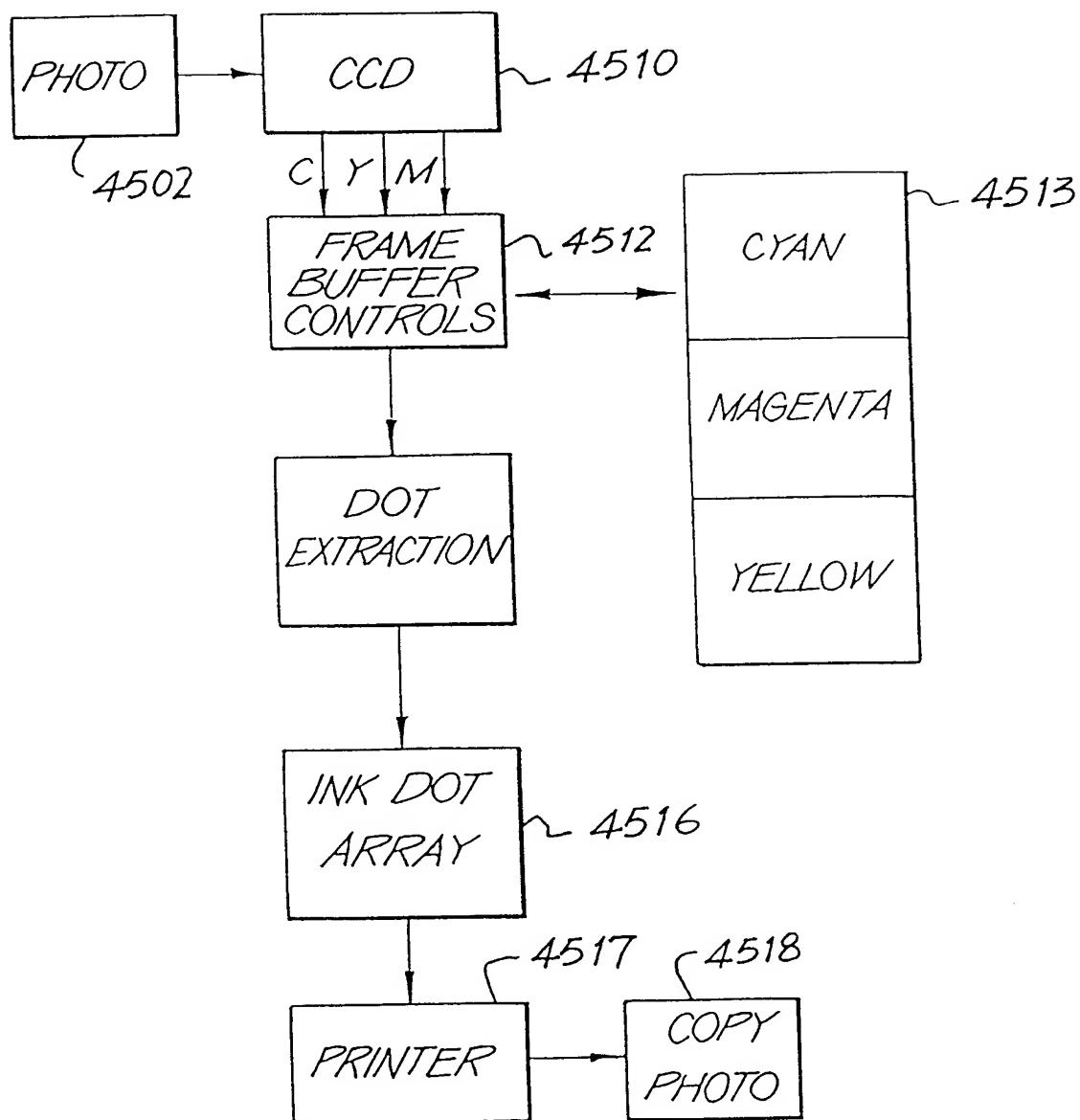


FIG. 291

205 / 246

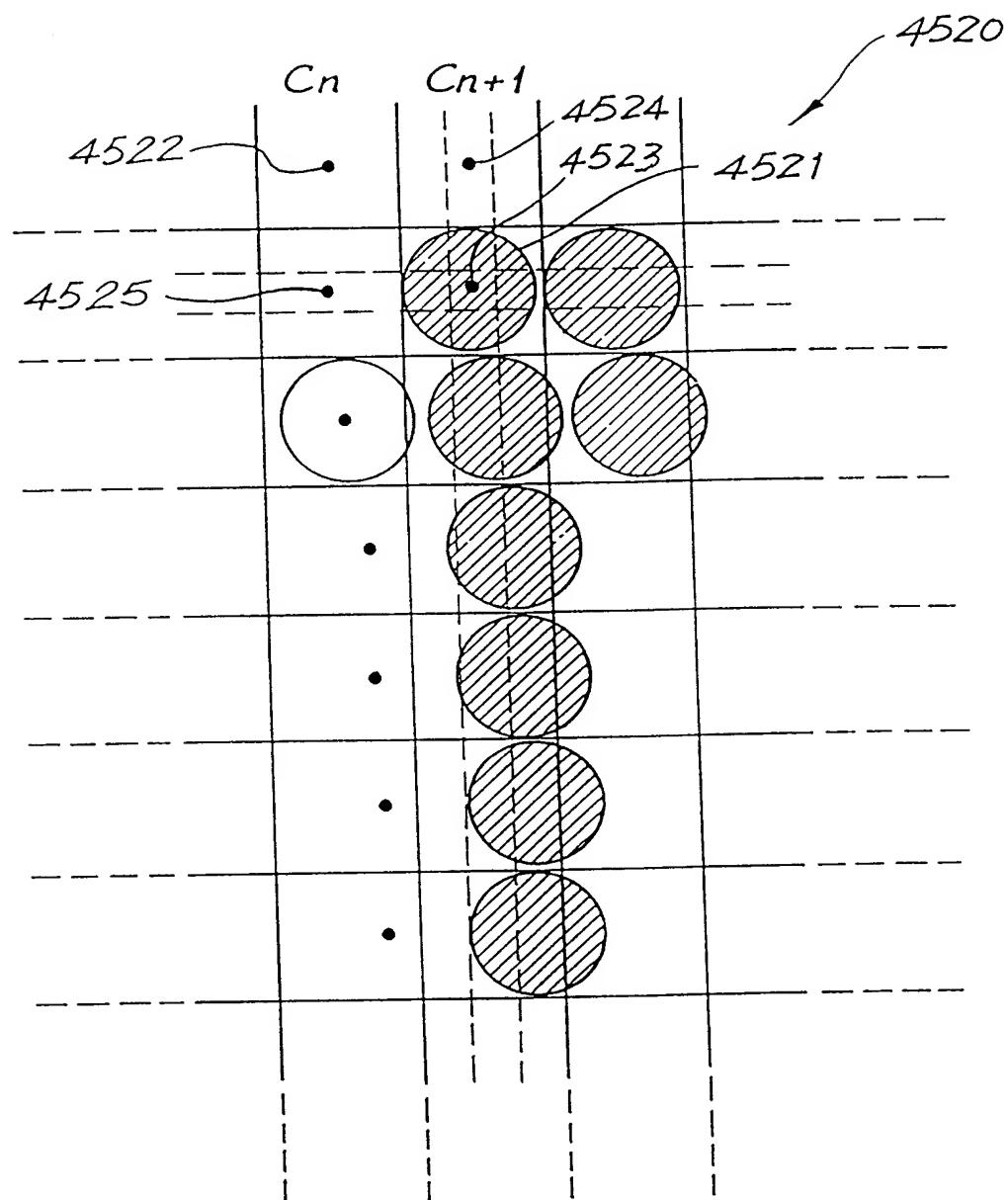


FIG. 292

206 / 246

## INK DOT ARRANGEMENTS

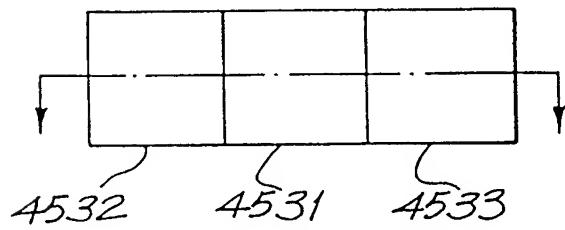
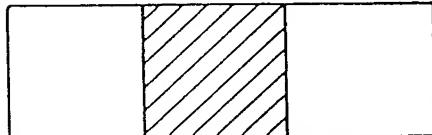
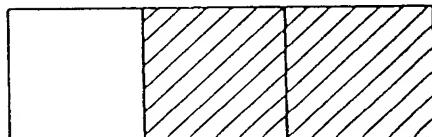
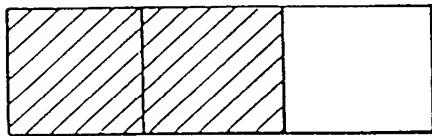
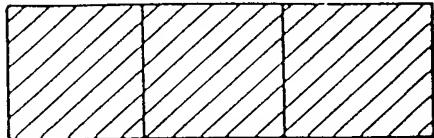
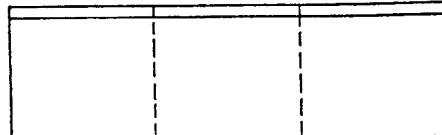
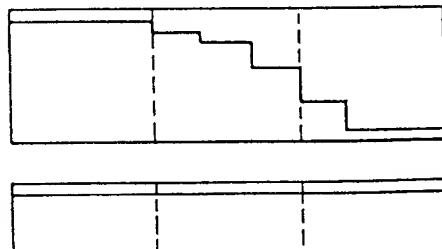
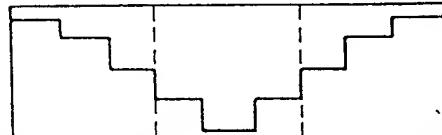
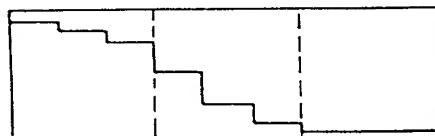
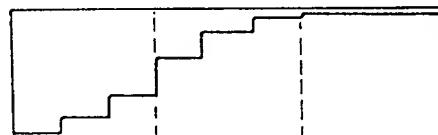
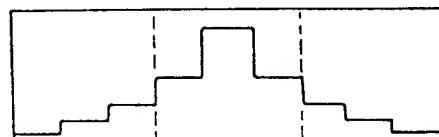
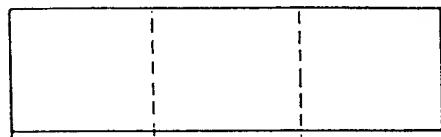


FIG. 293

## CCD VALUES



4535  
↑

207 / 246

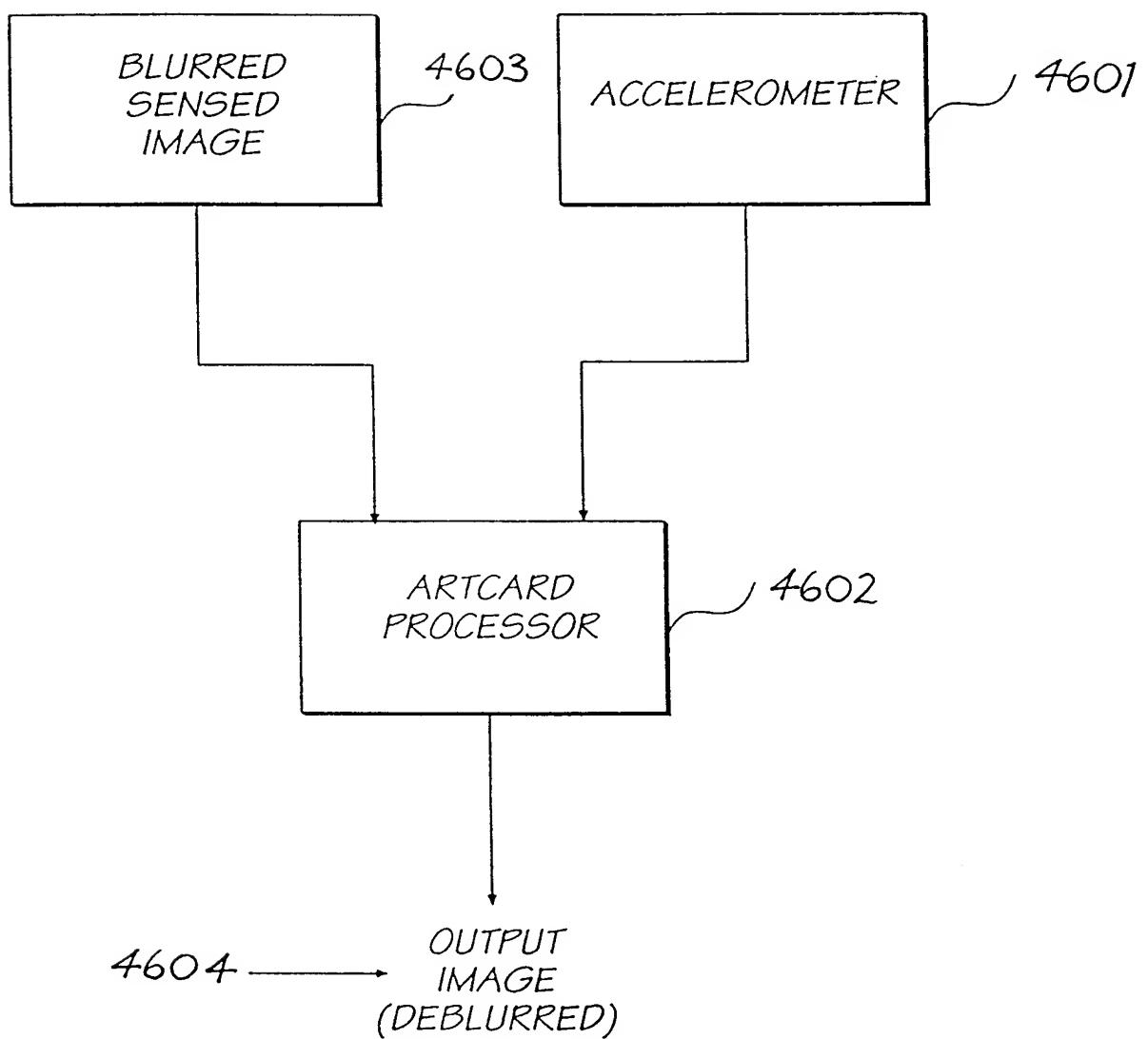


FIG. 294

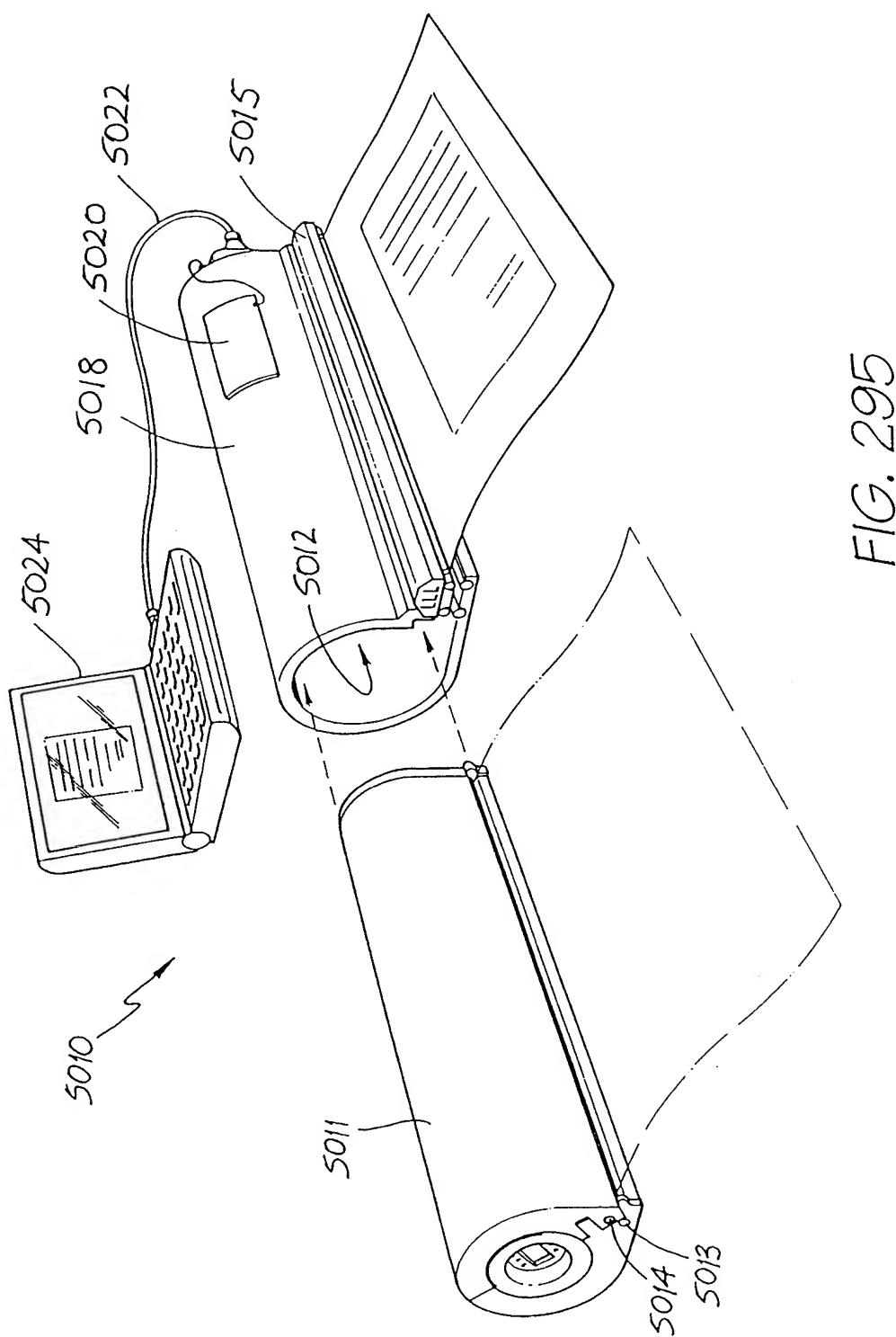


FIG. 295

209 / 246

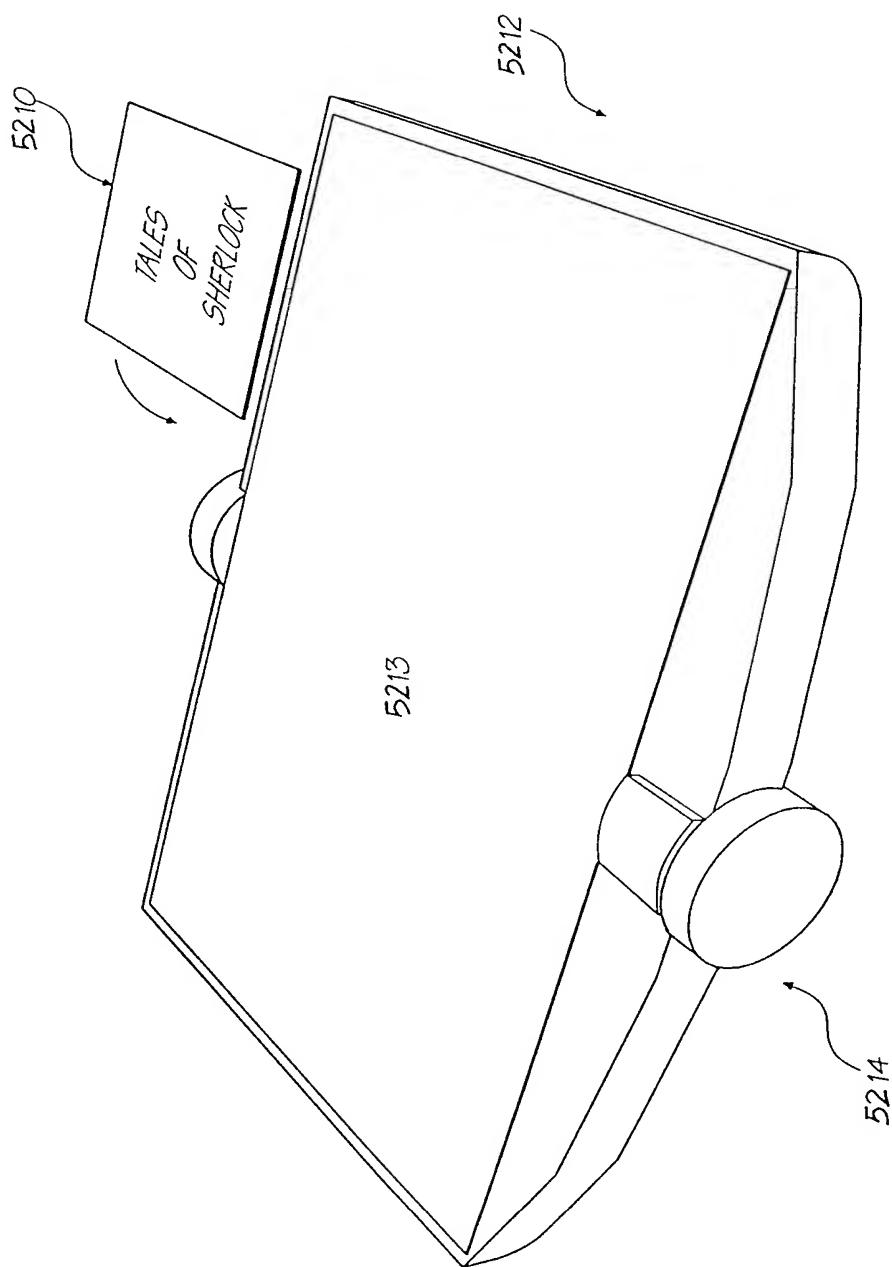


FIG. 296

210 / 246

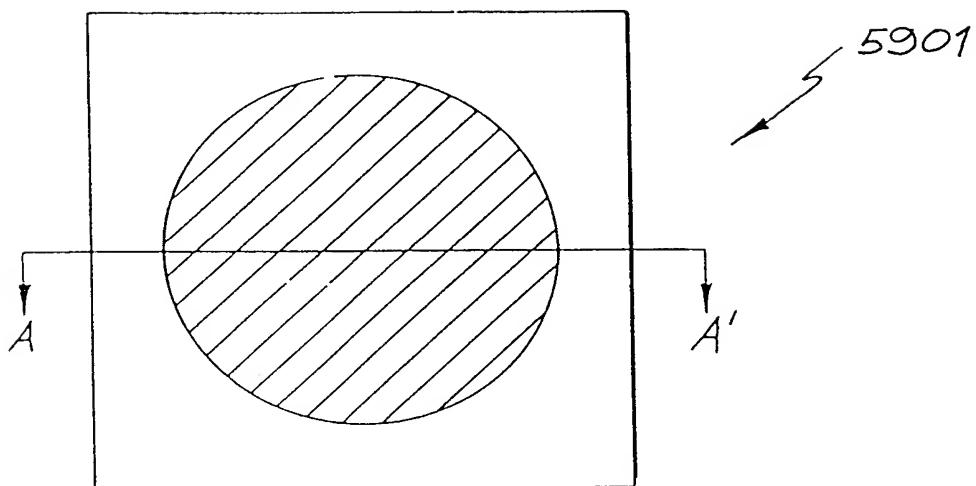


FIG. 297

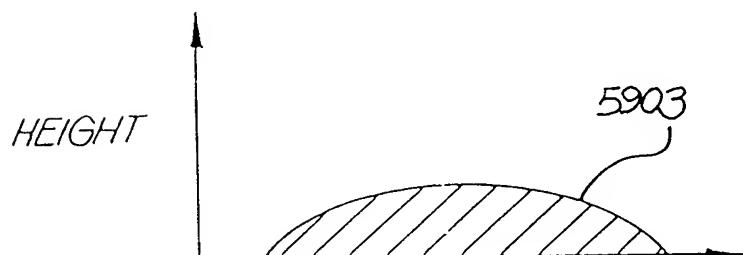


FIG. 298

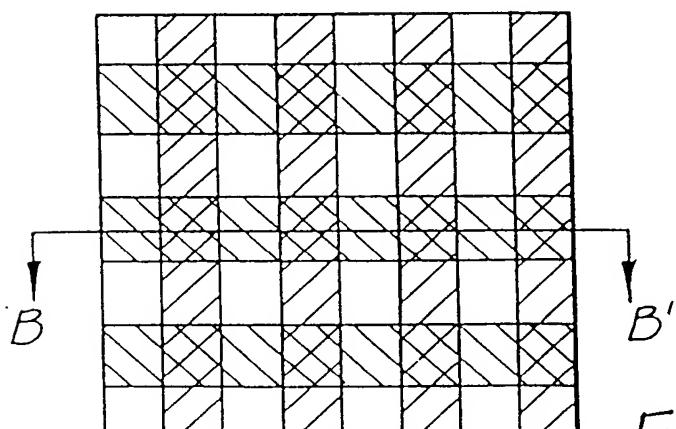


FIG. 299

211 / 246

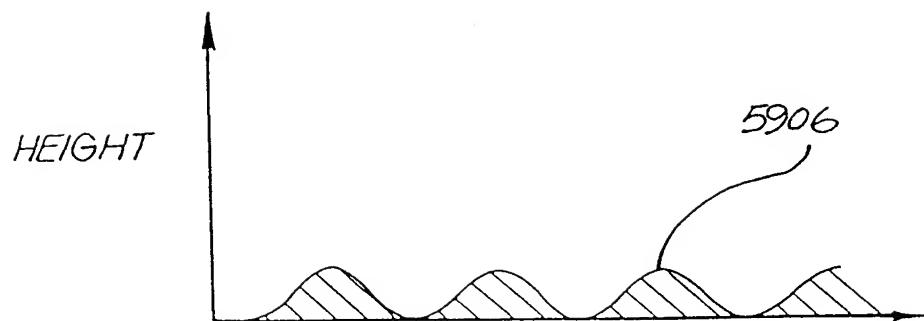


FIG. 300

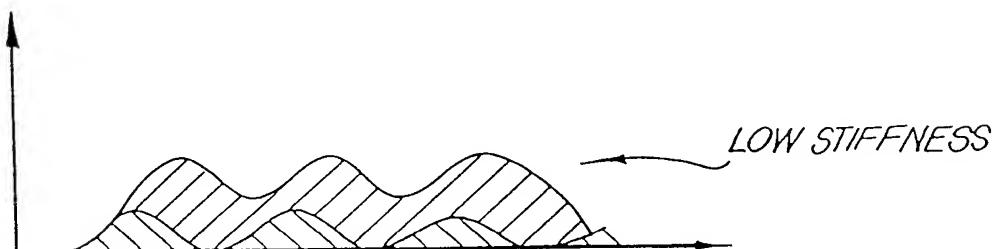


FIG. 301

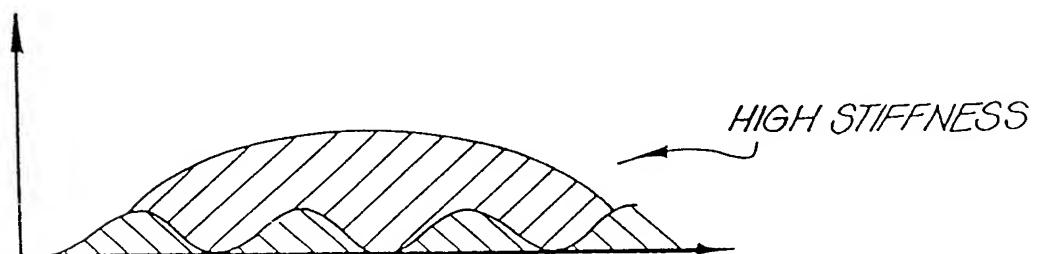


FIG. 302

212 / 246

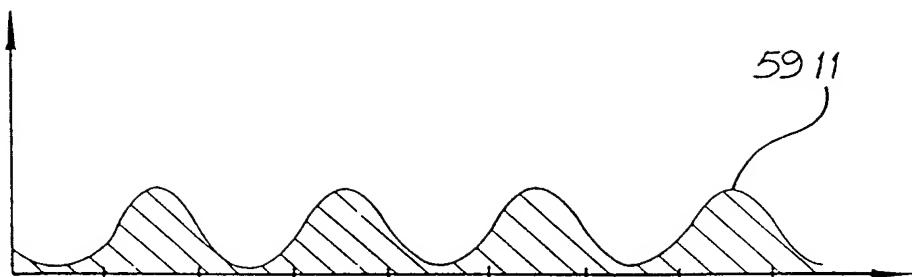


FIG. 303

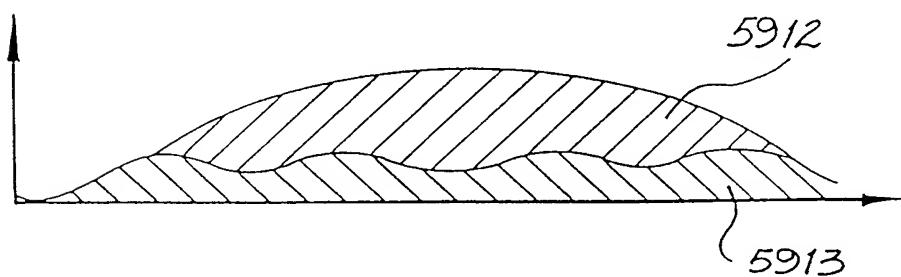


FIG. 304

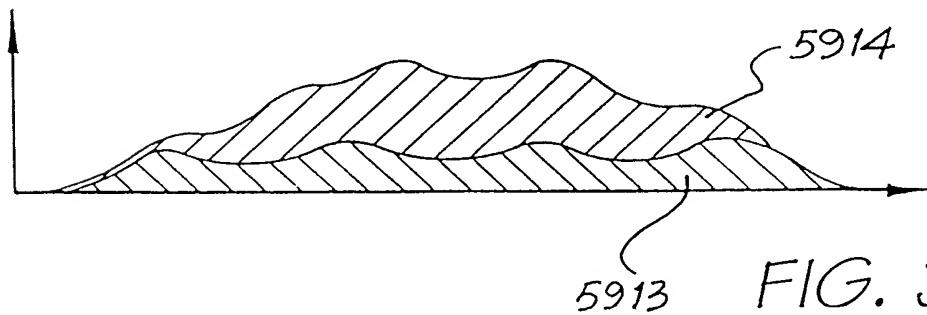


FIG. 305

213 / 246

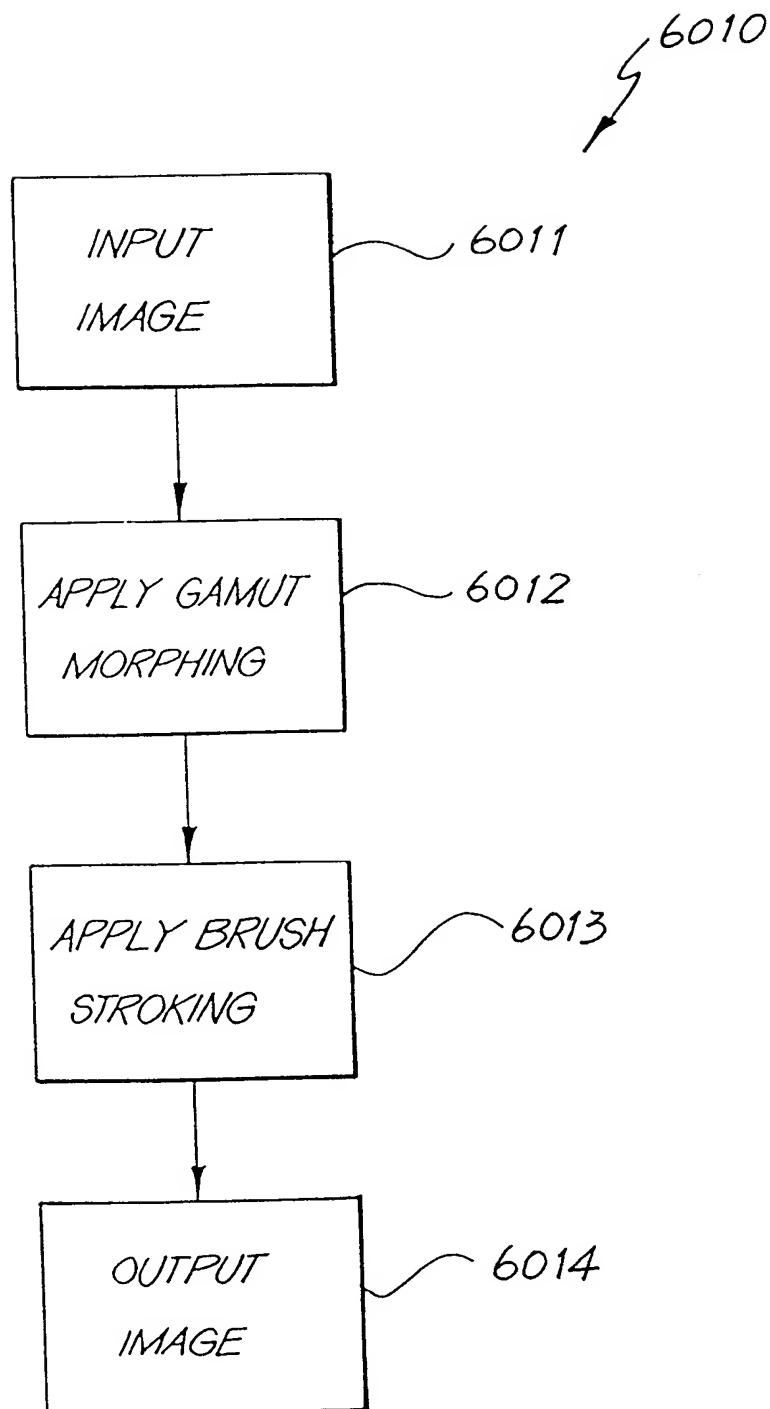


FIG. 306

214 / 246

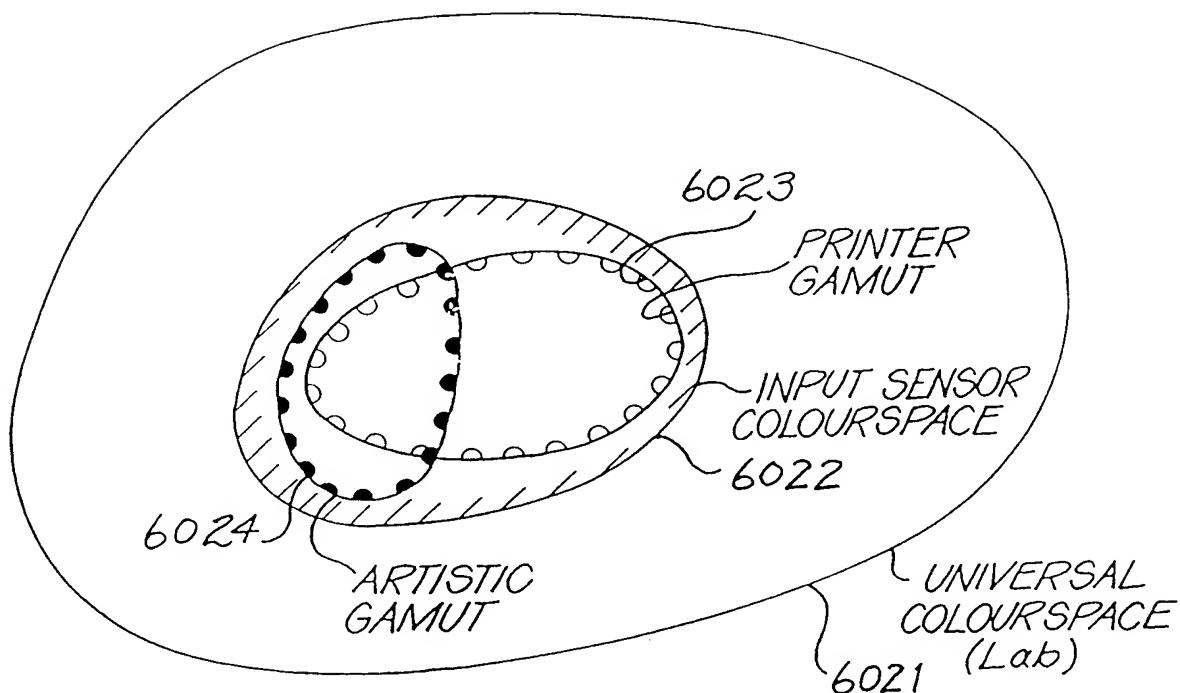


FIG. 307

215 / 246

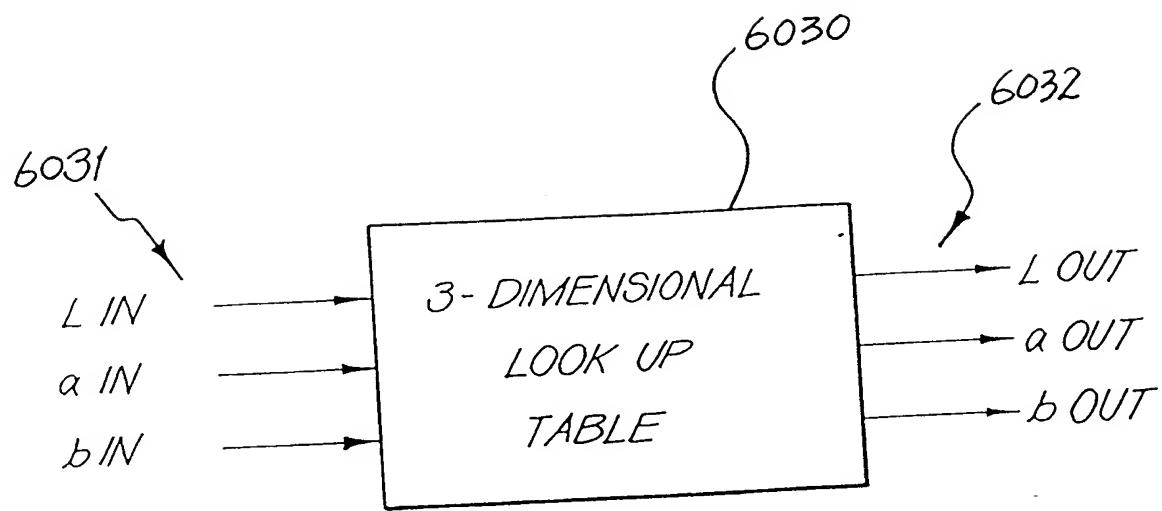


FIG. 308

216 / 246

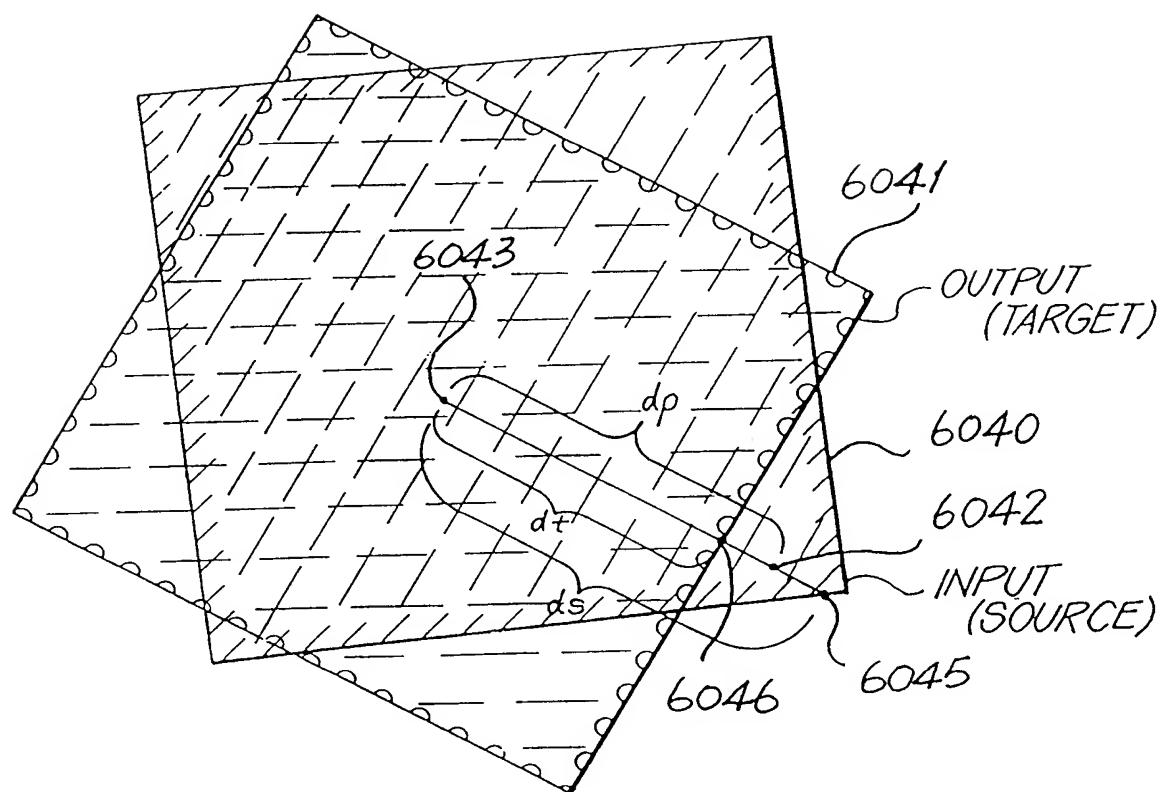


FIG. 309

217 / 246

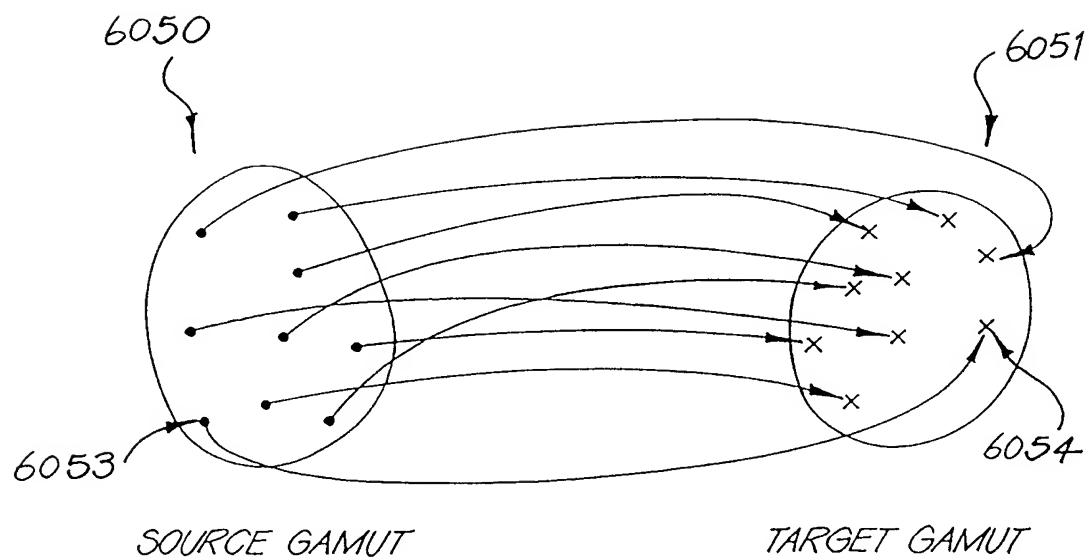


FIG. 310

218 / 246

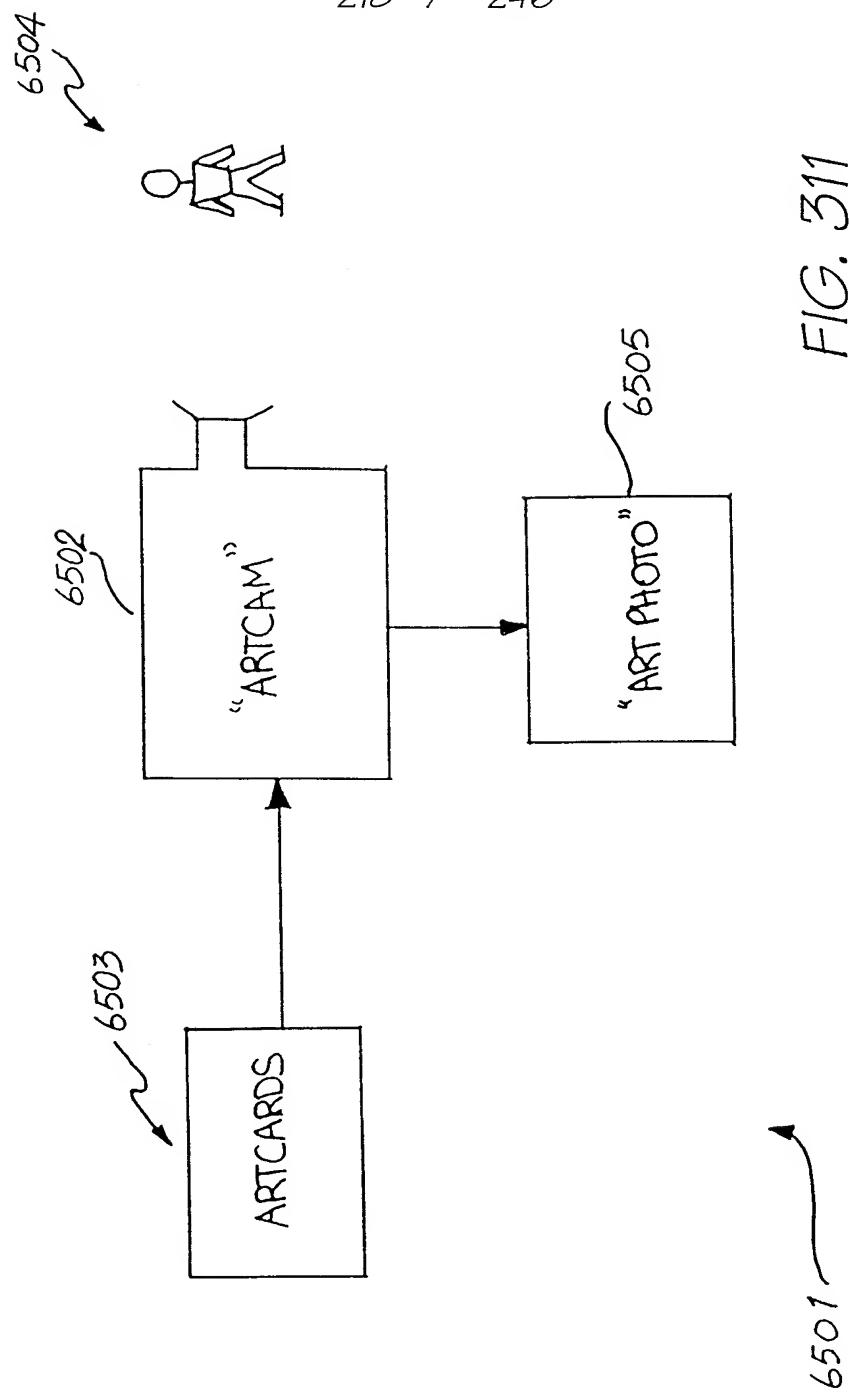


FIG. 311

219 / 246

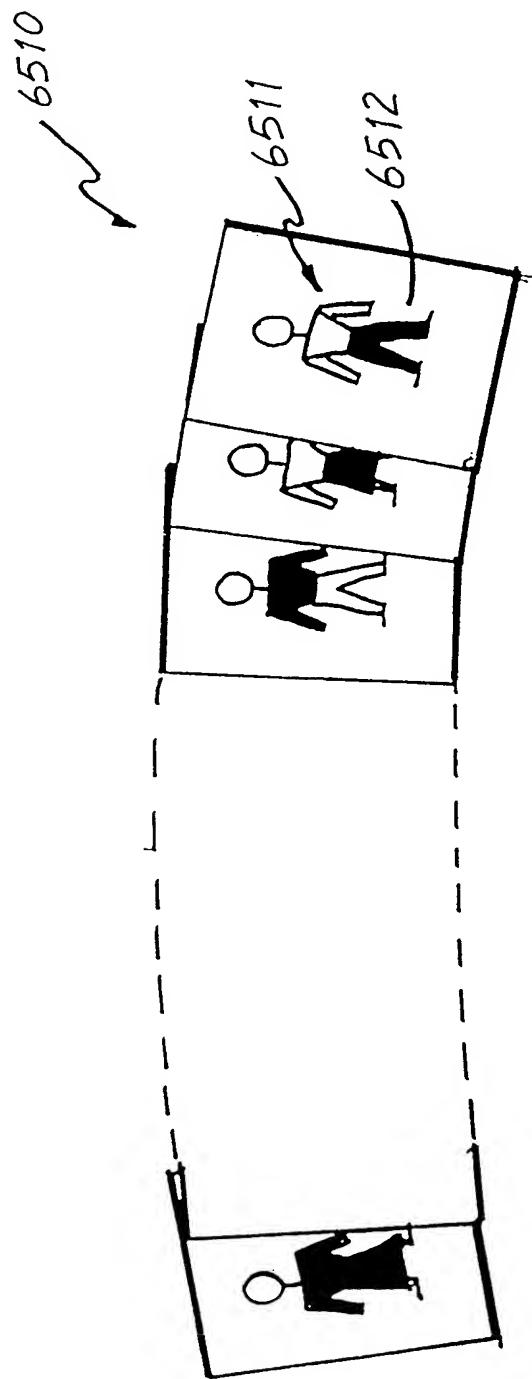


FIG. 312

220 / 246

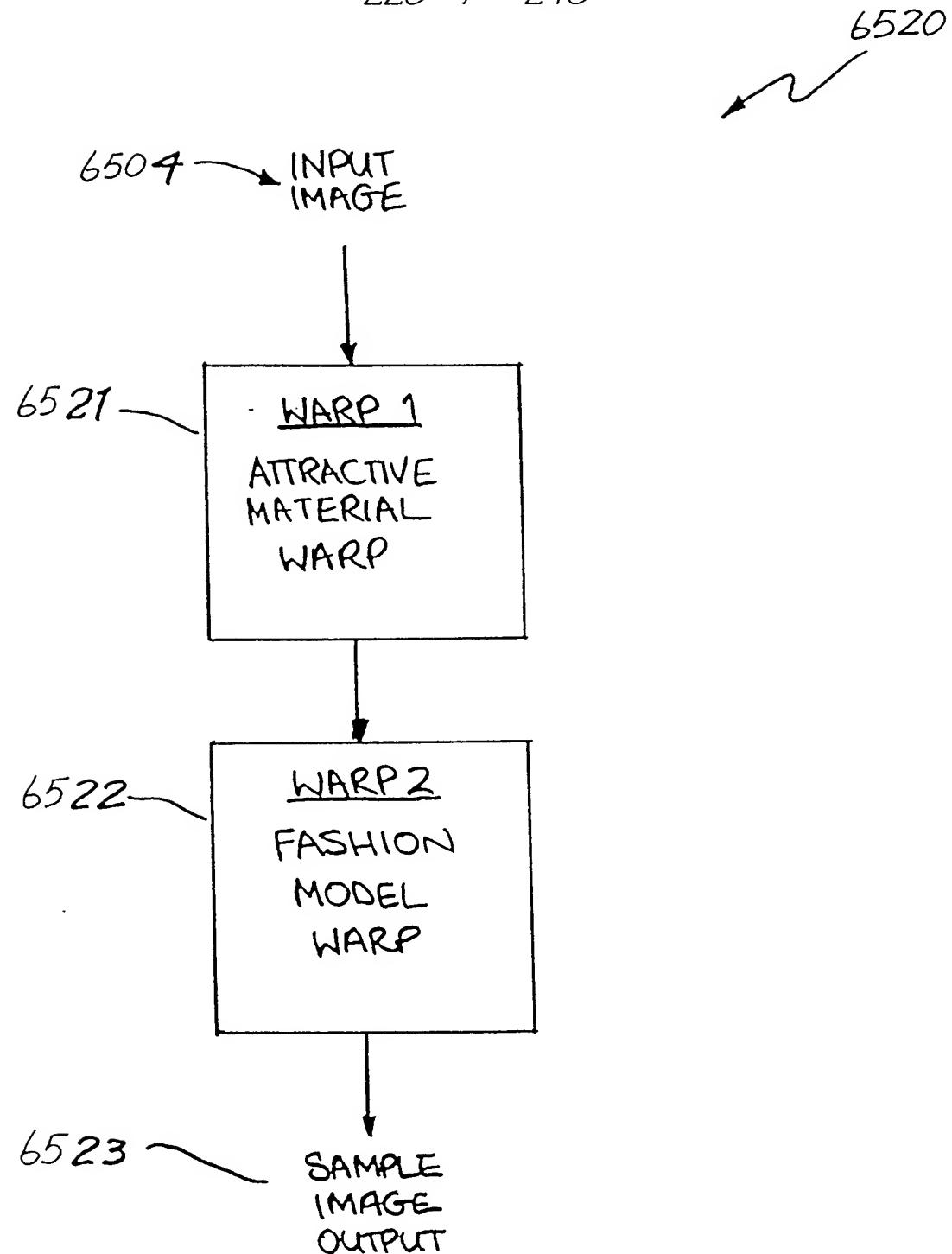


FIG. 313

221 / 246

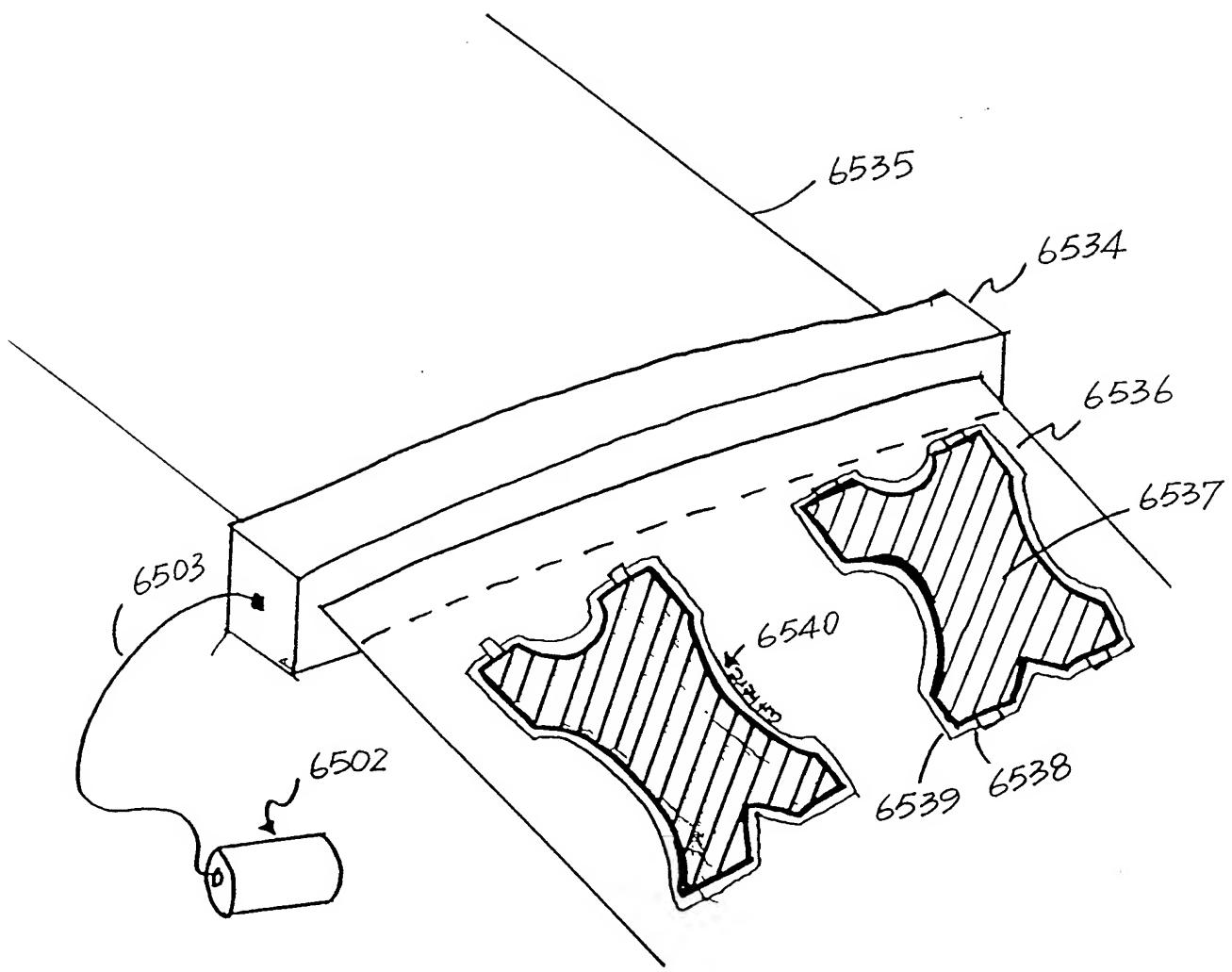


FIG. 314

222 / 246

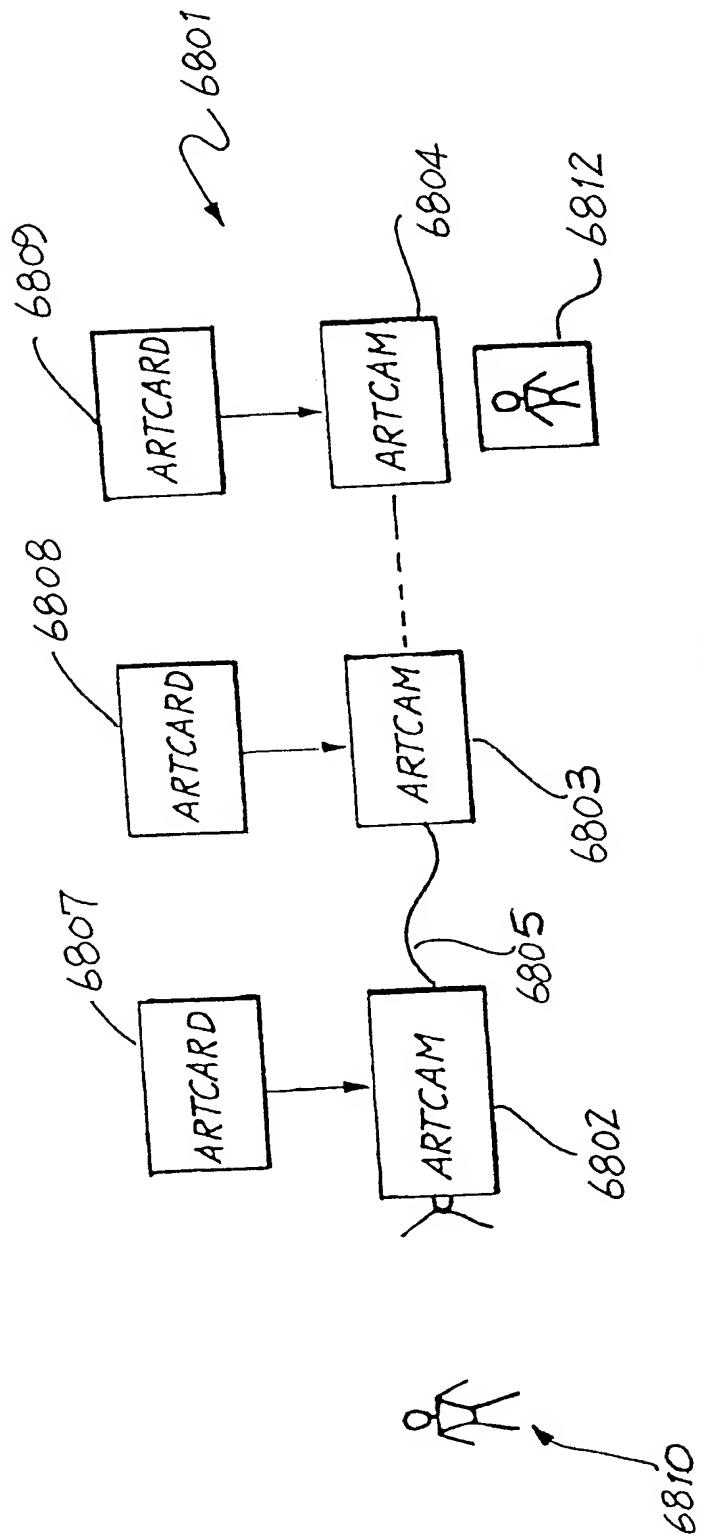


FIG. 315

223 / 246

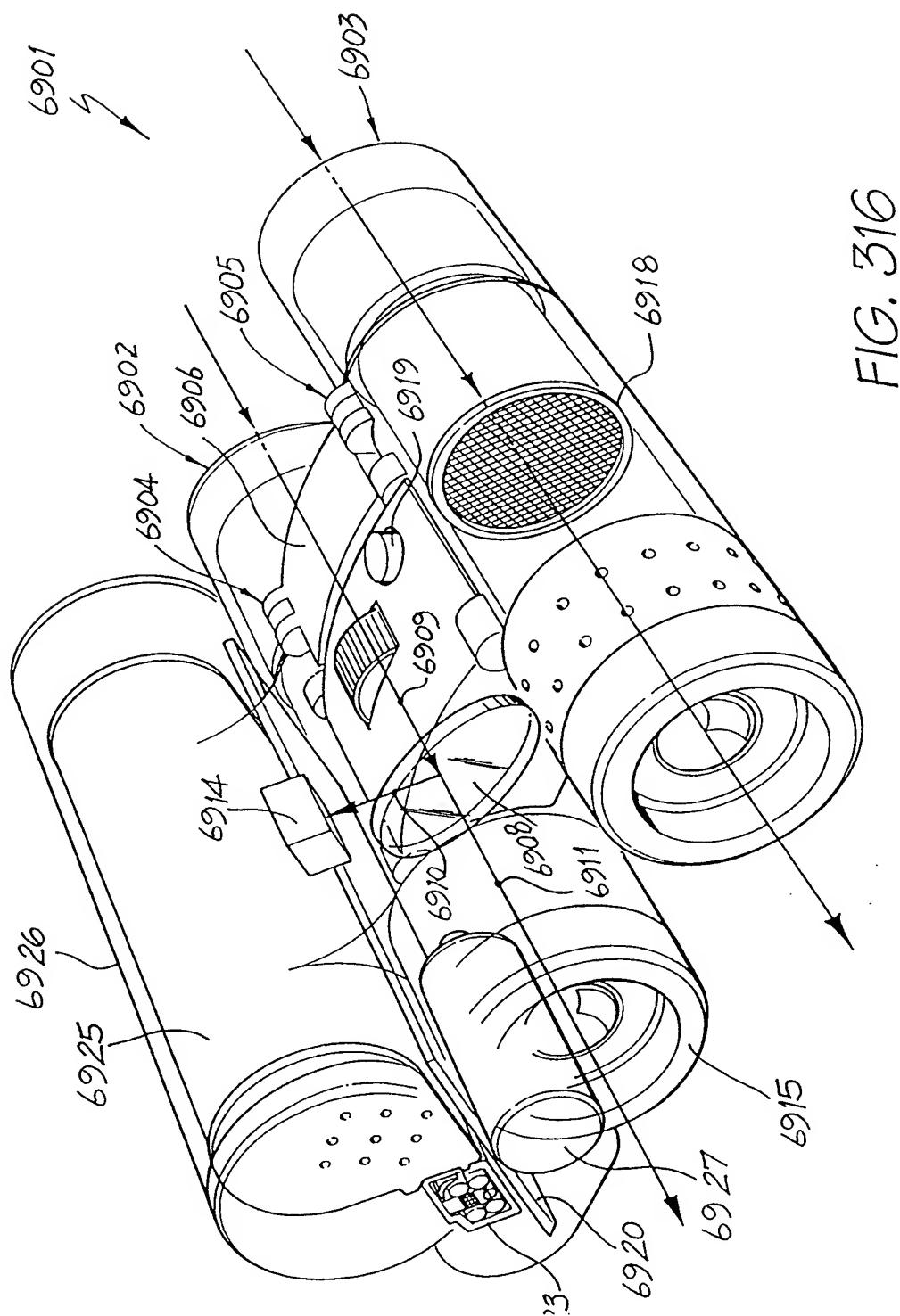


FIG. 316

224 / 246

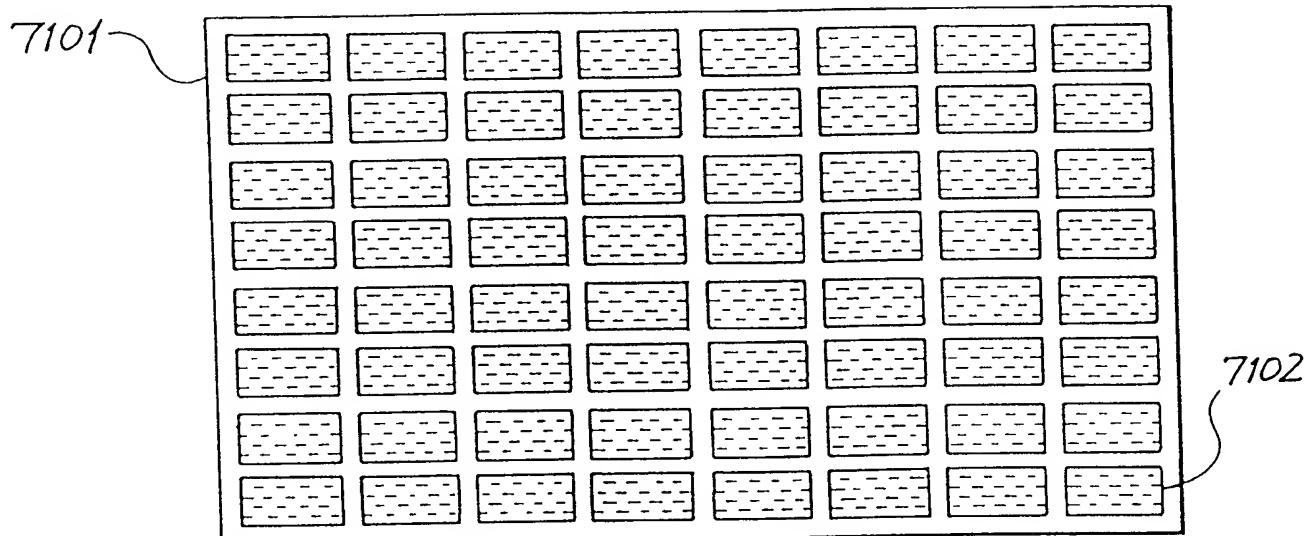


FIG. 317

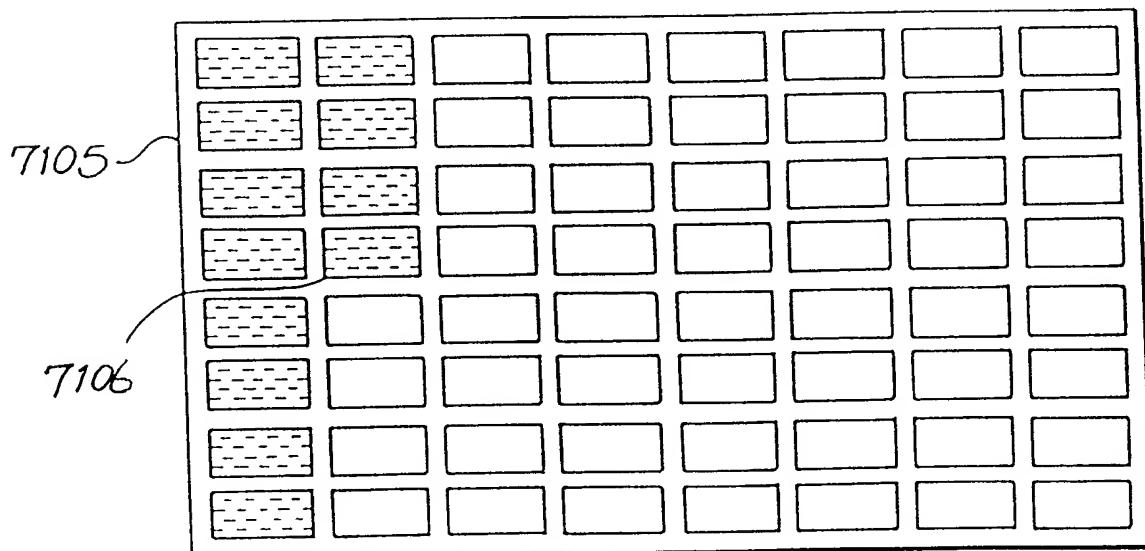


FIG. 318

225 / 246

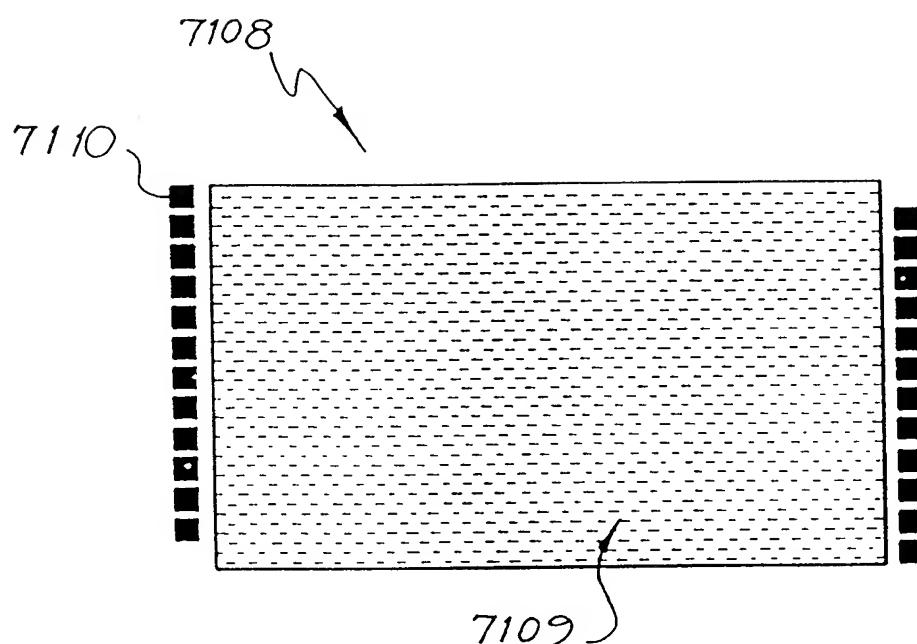


FIG. 319

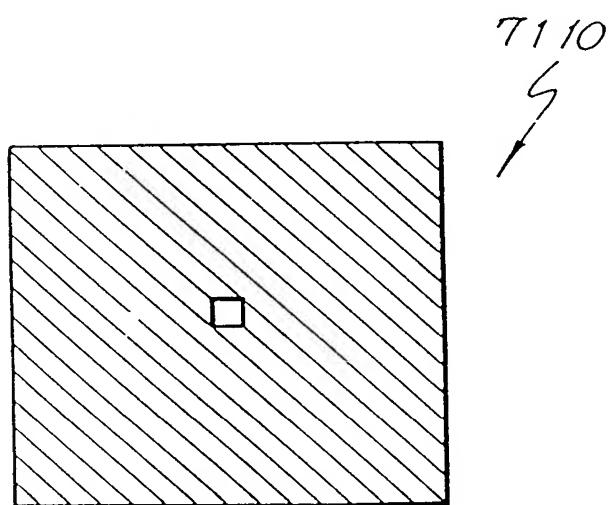
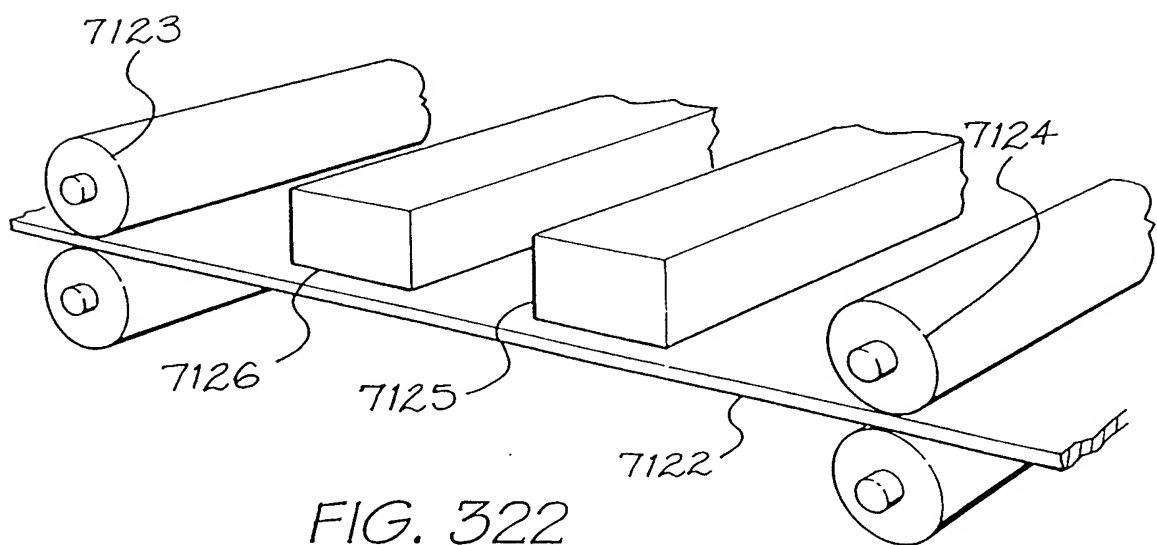
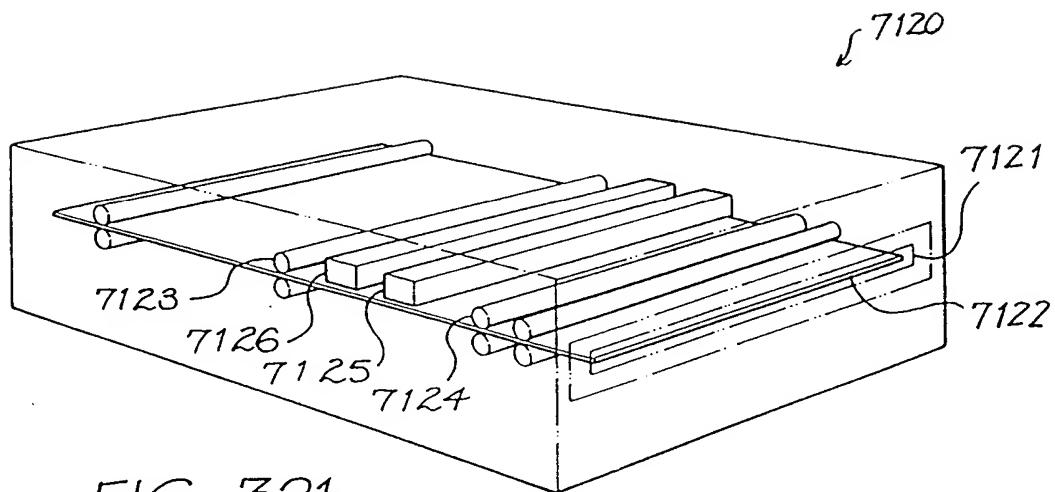


FIG. 320

226 / 246



227 / 246

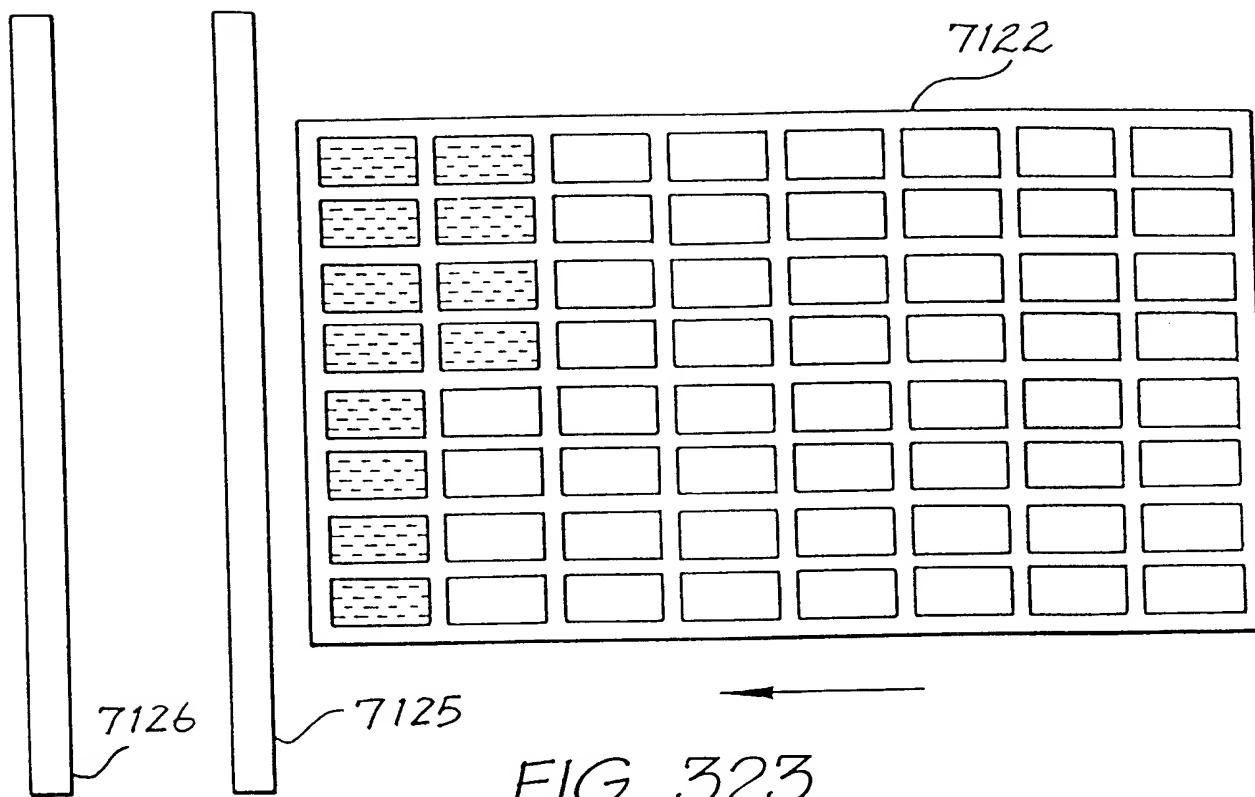
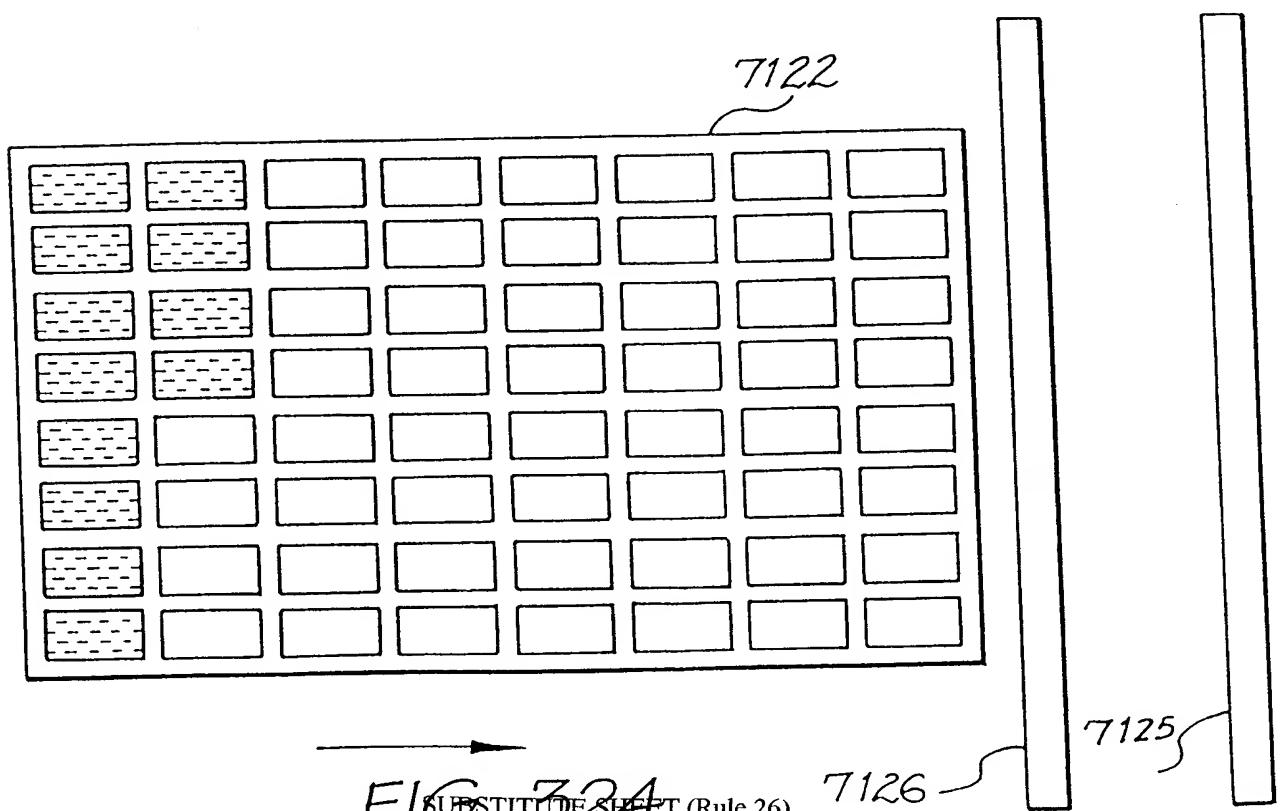


FIG. 323

FIG. 324  
SUBSTITUTE SHEET (Rule 26)

7126

7125

228 / 246

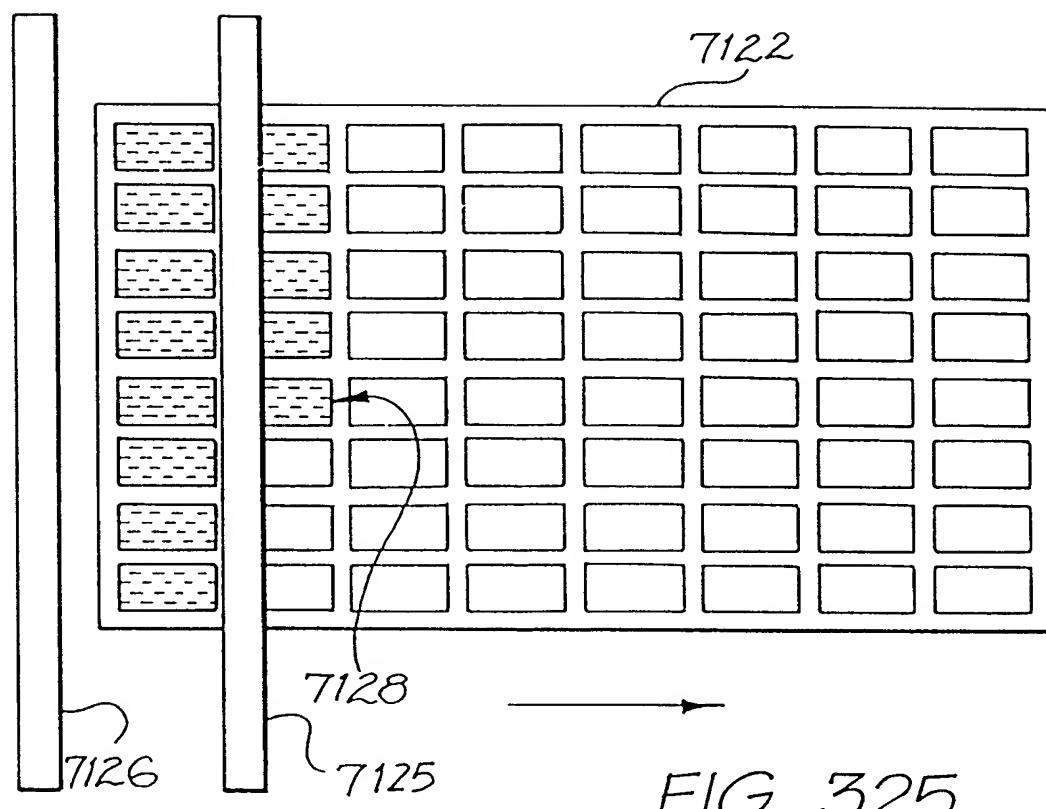
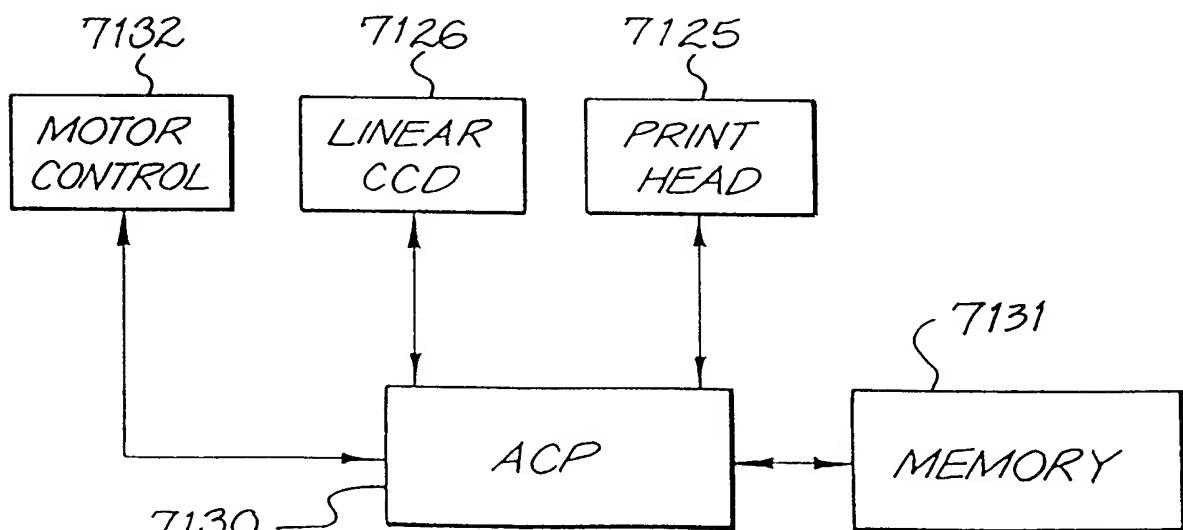


FIG. 325

FIG. 326  
SUBSTITUTE SHEET (Rule 26)

229 / 246

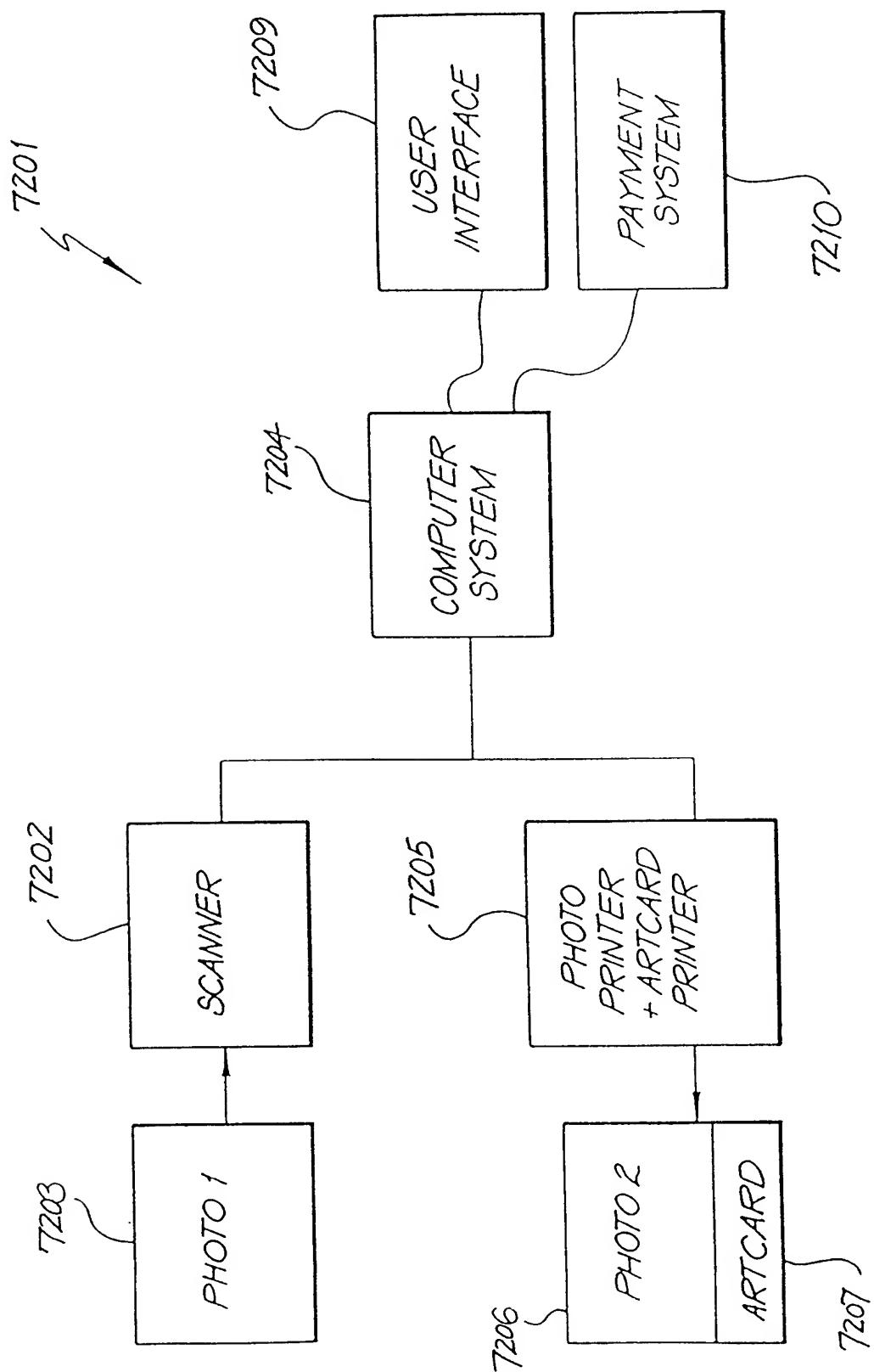


FIG. 327

230 / 246

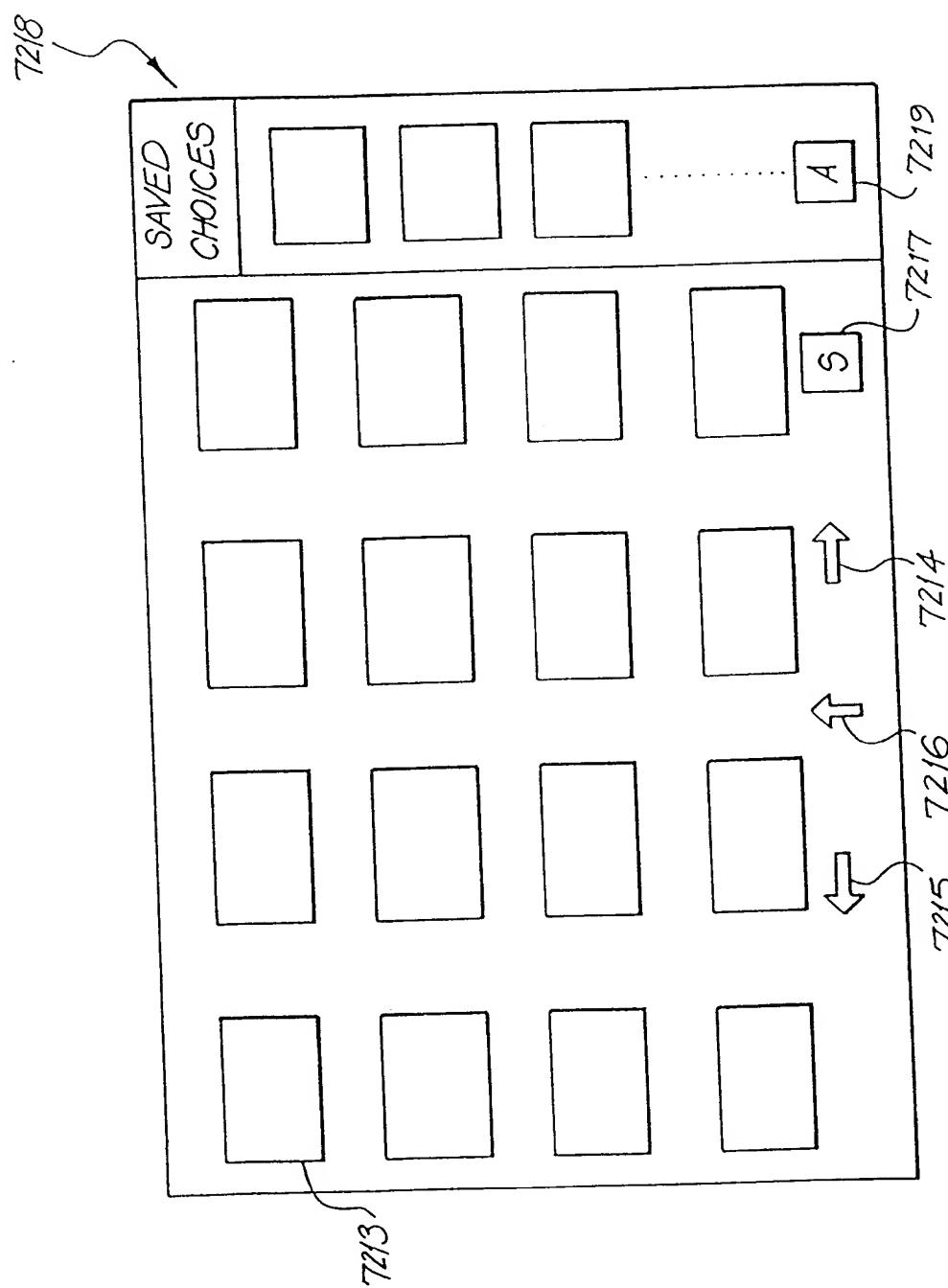
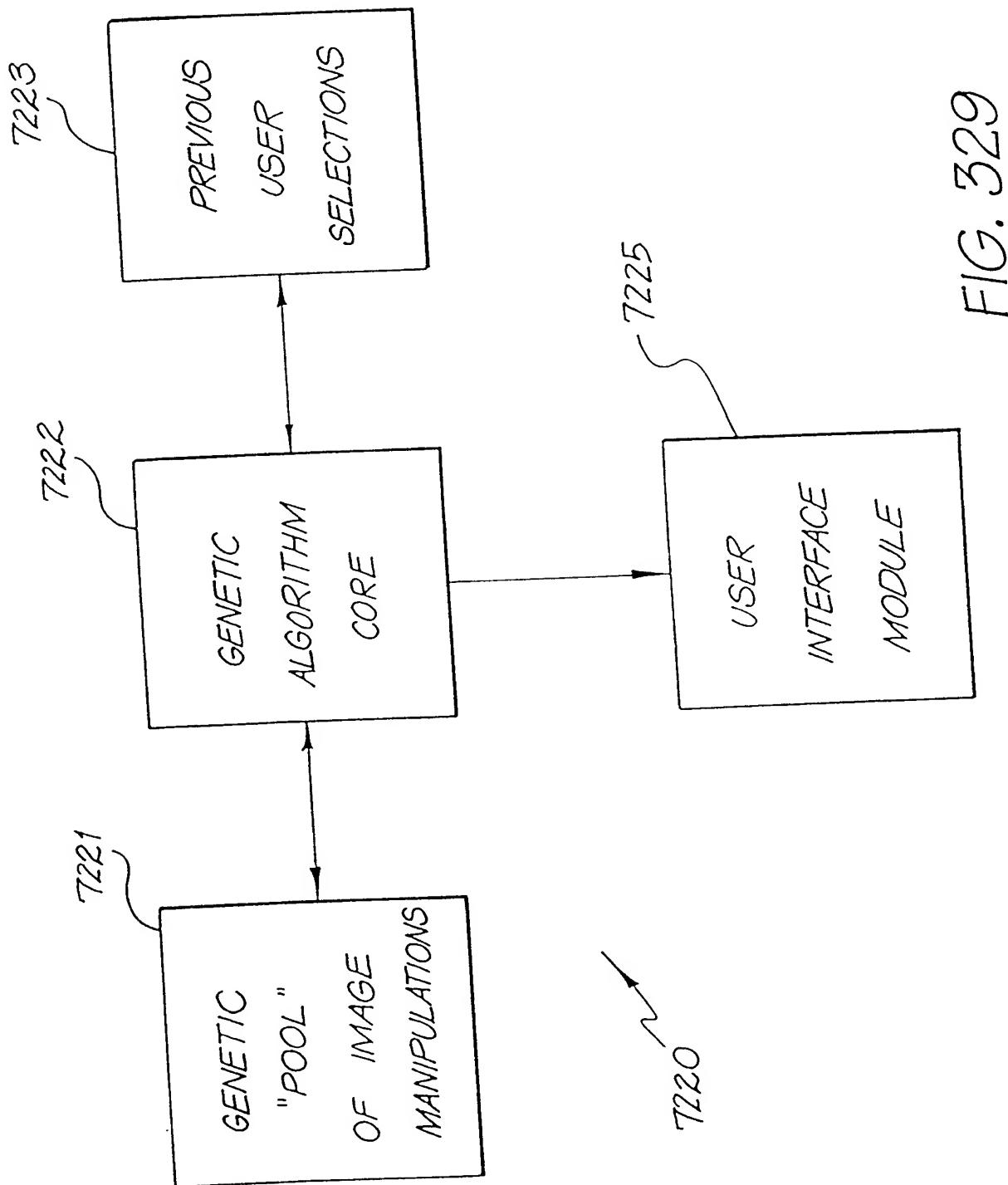


FIG. 328

231 / 246



232 / 246

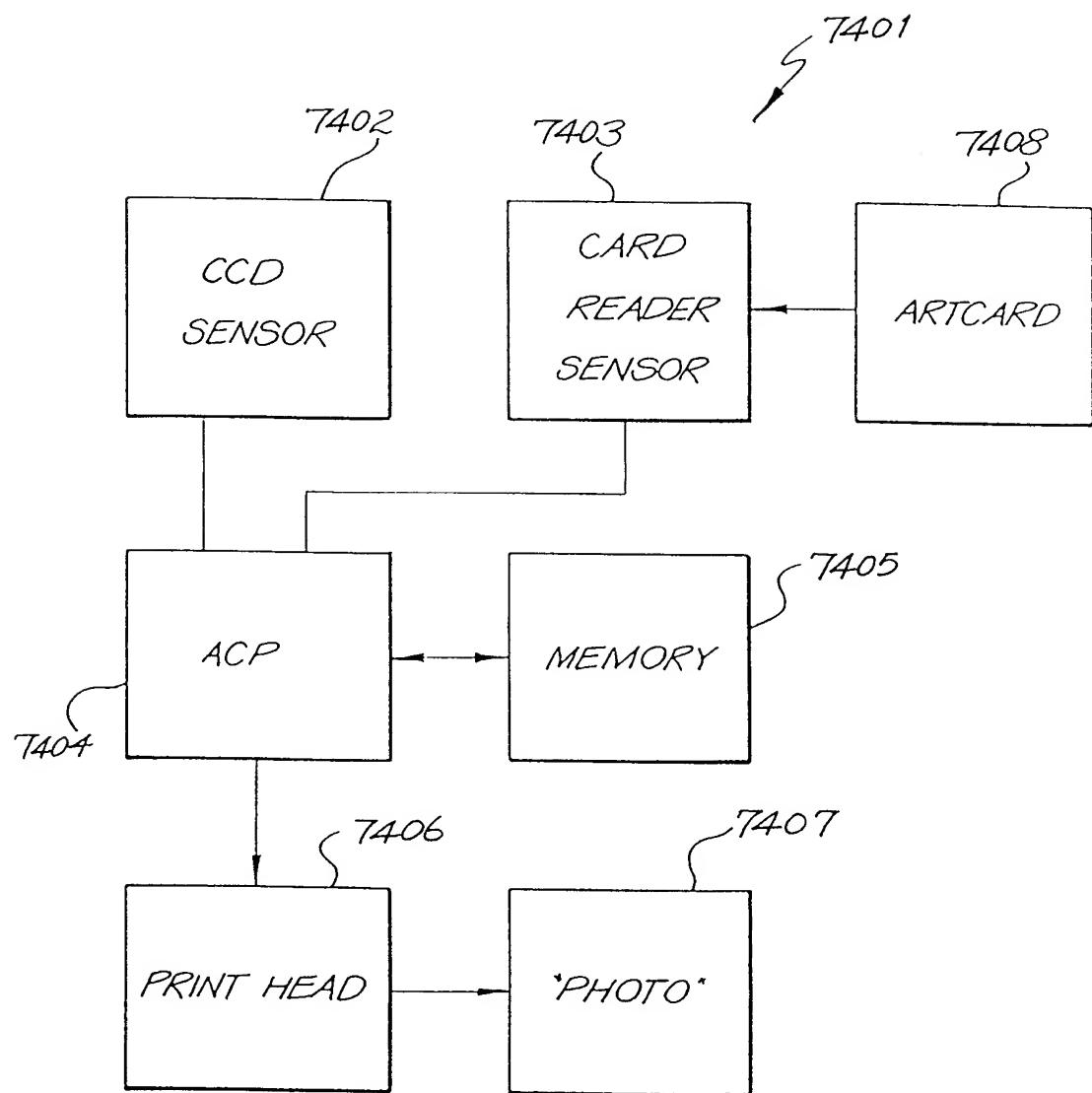


FIG. 330

233 / 246

ART CARD INSERTED      STORED IMAGE

TIME  
↓

7413



7412



7414



7414



7416



7416



7417



7417



7419



7419



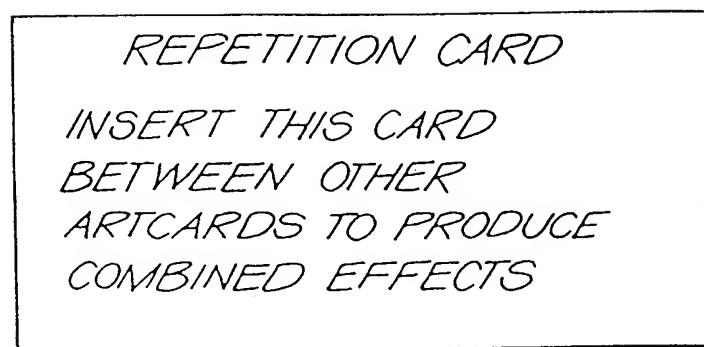
7420



7420

FIG. 331

234 / 246



7410

FIG. 332

235 / 246

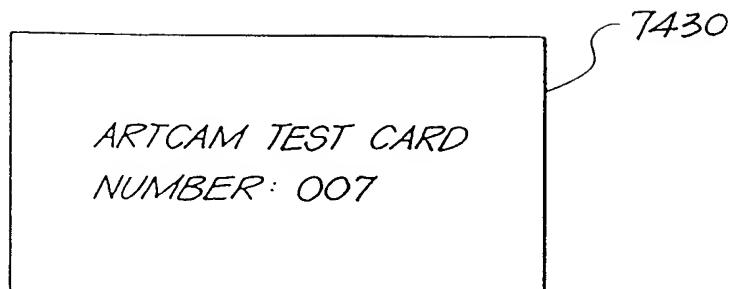


FIG. 333

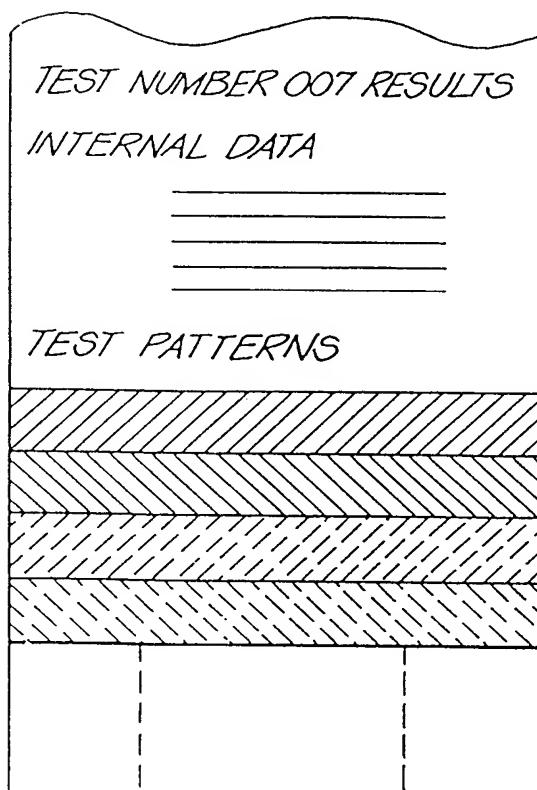
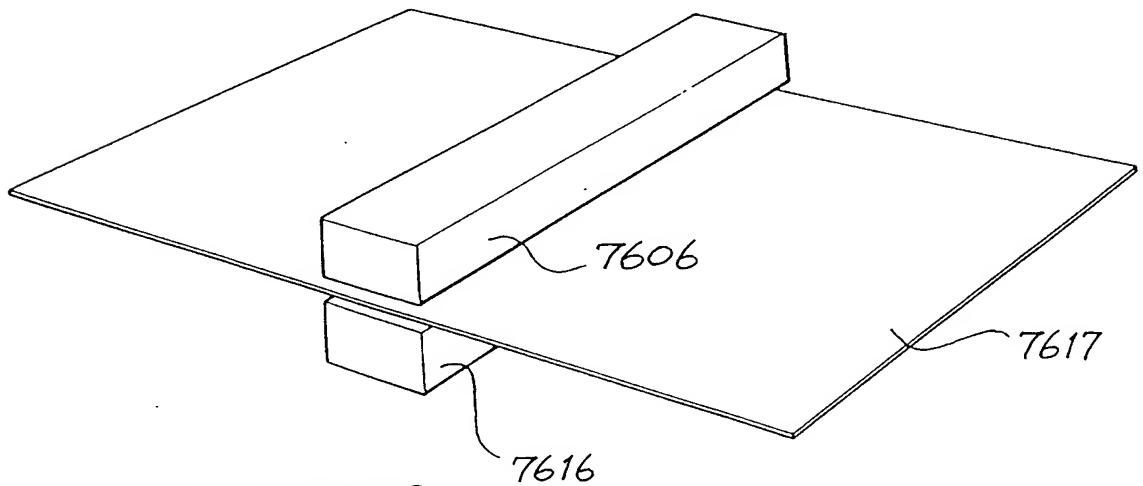
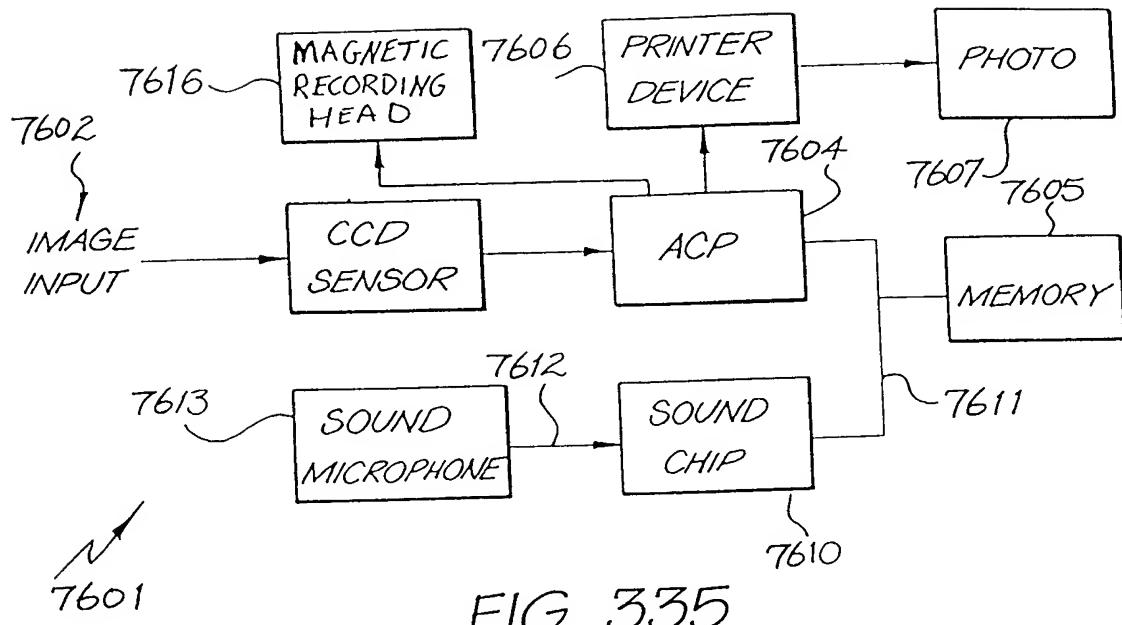


FIG. 334



237 / 246

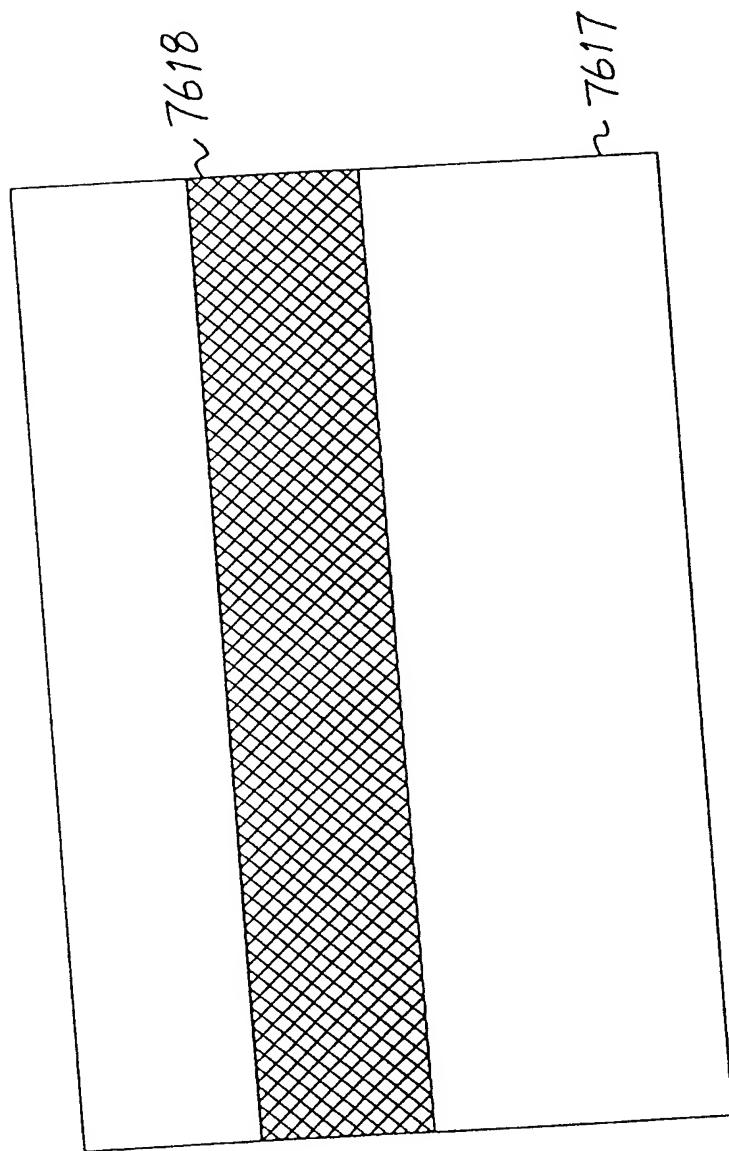


FIG. 337

238 / 246

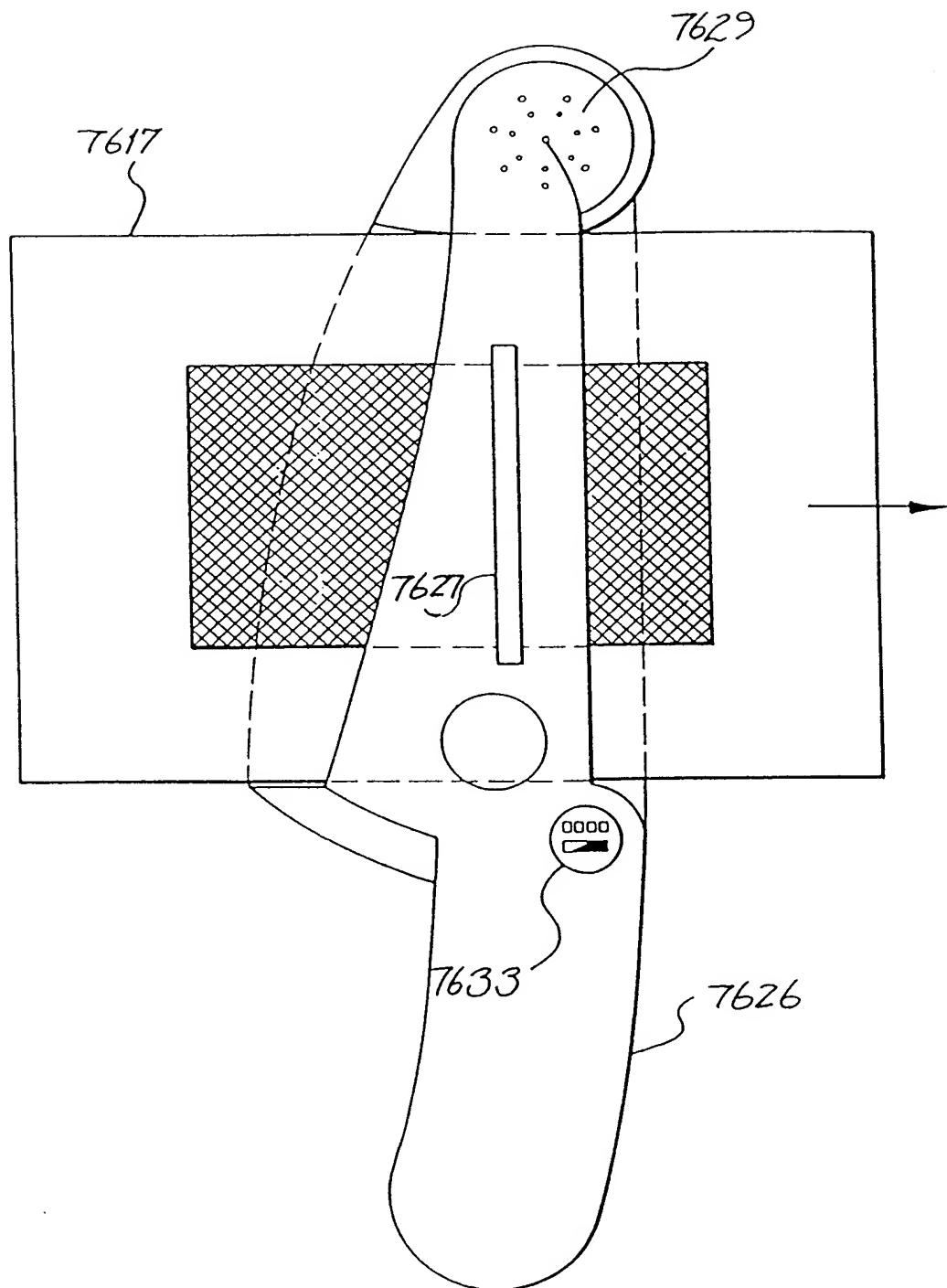


FIG. 338

239 / 246

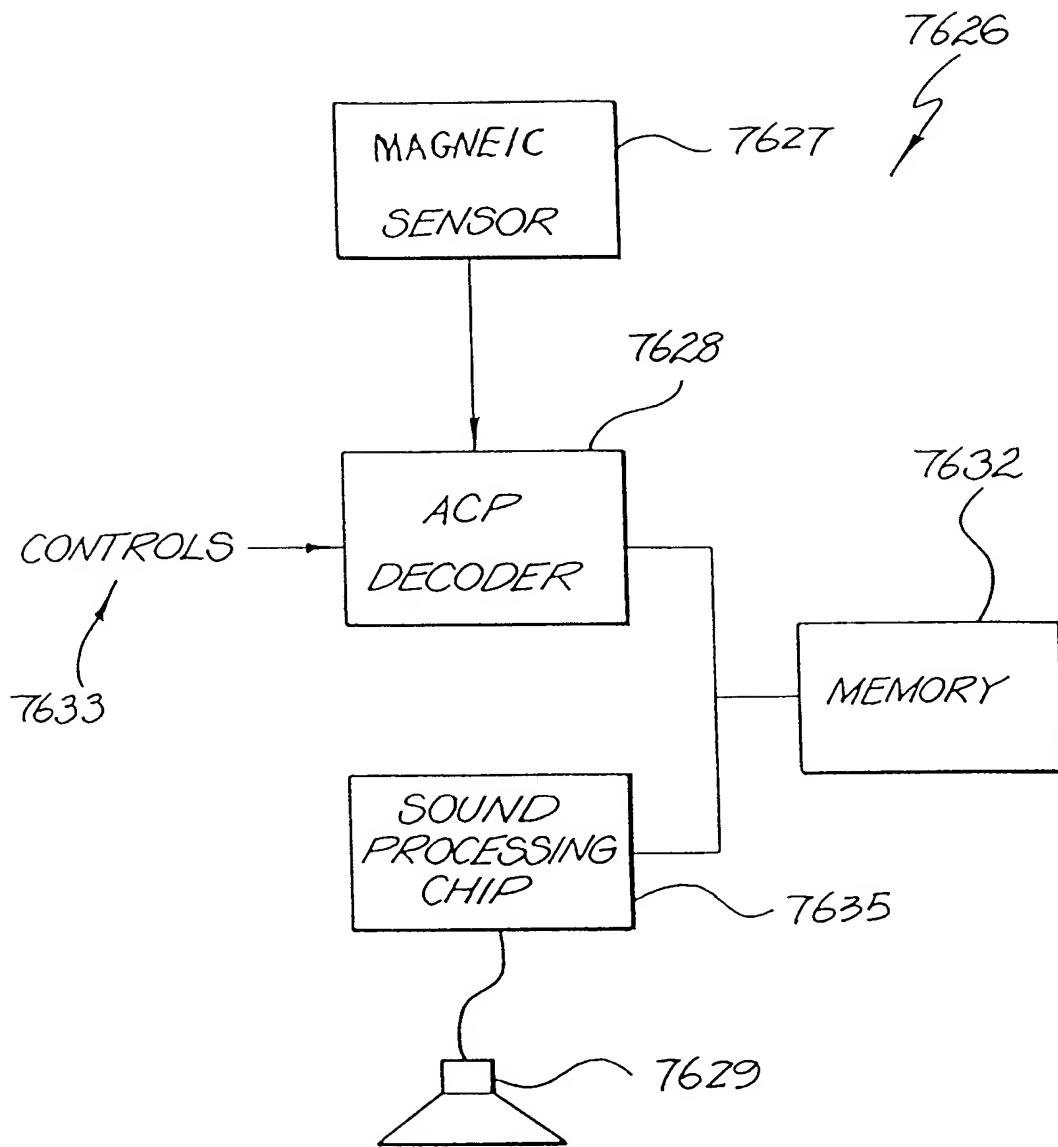


FIG. 339

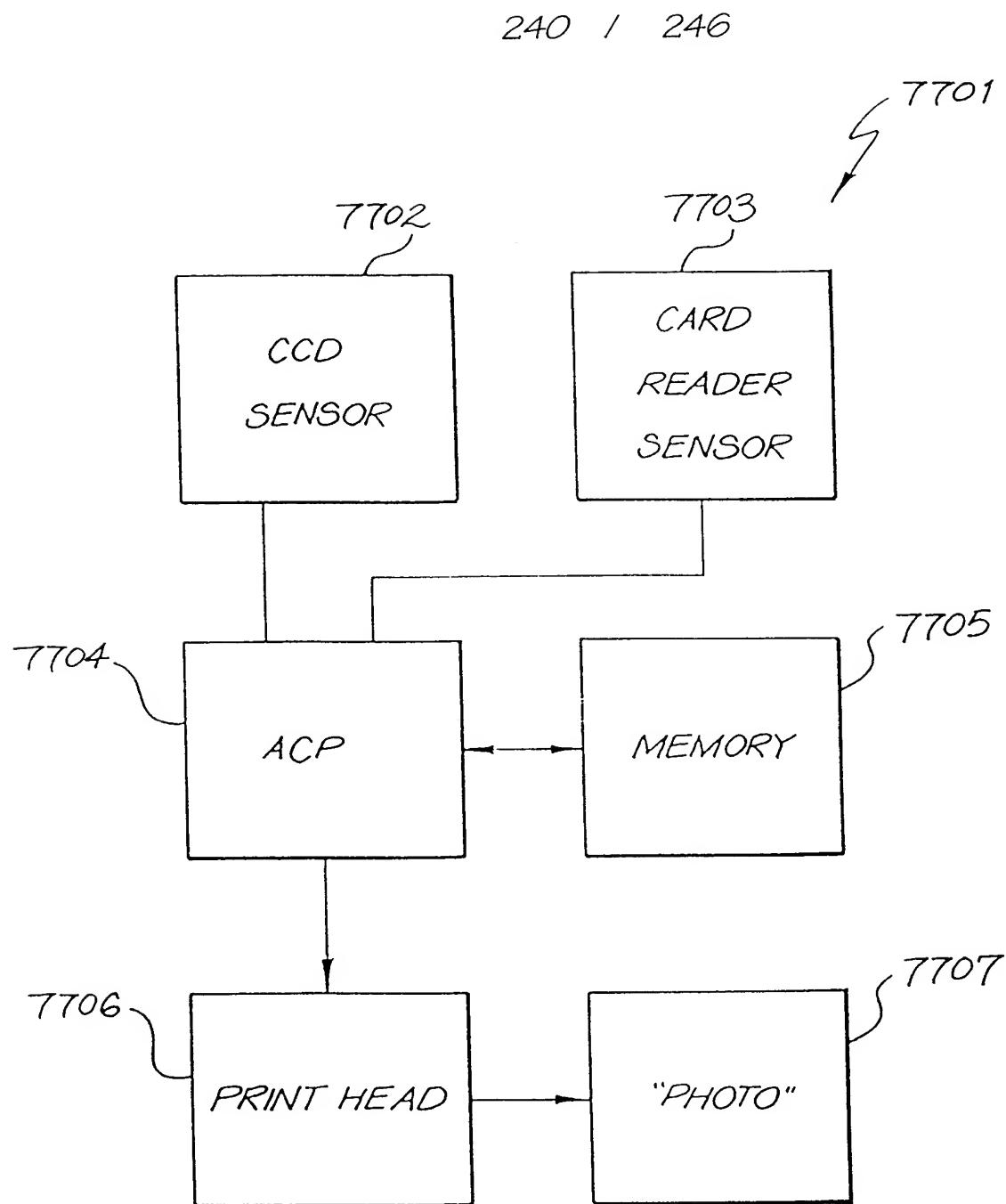


FIG. 340

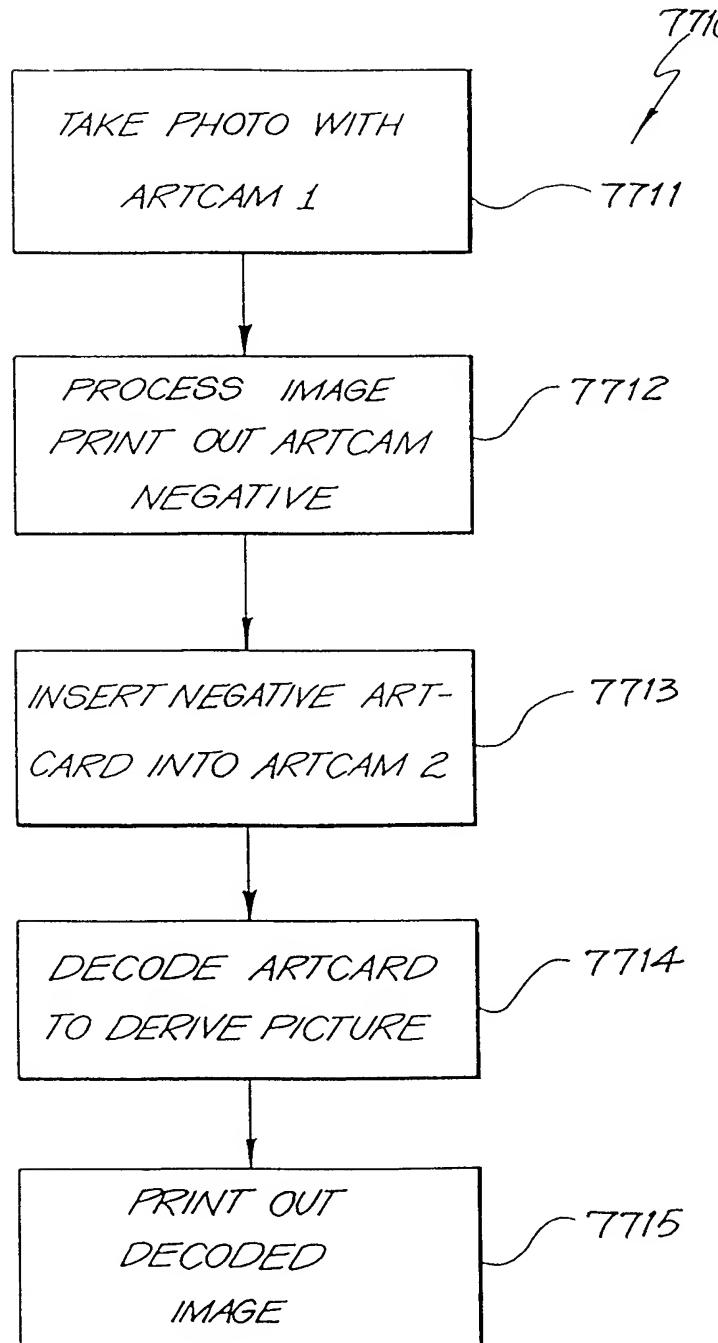


FIG. 341

242 / 246

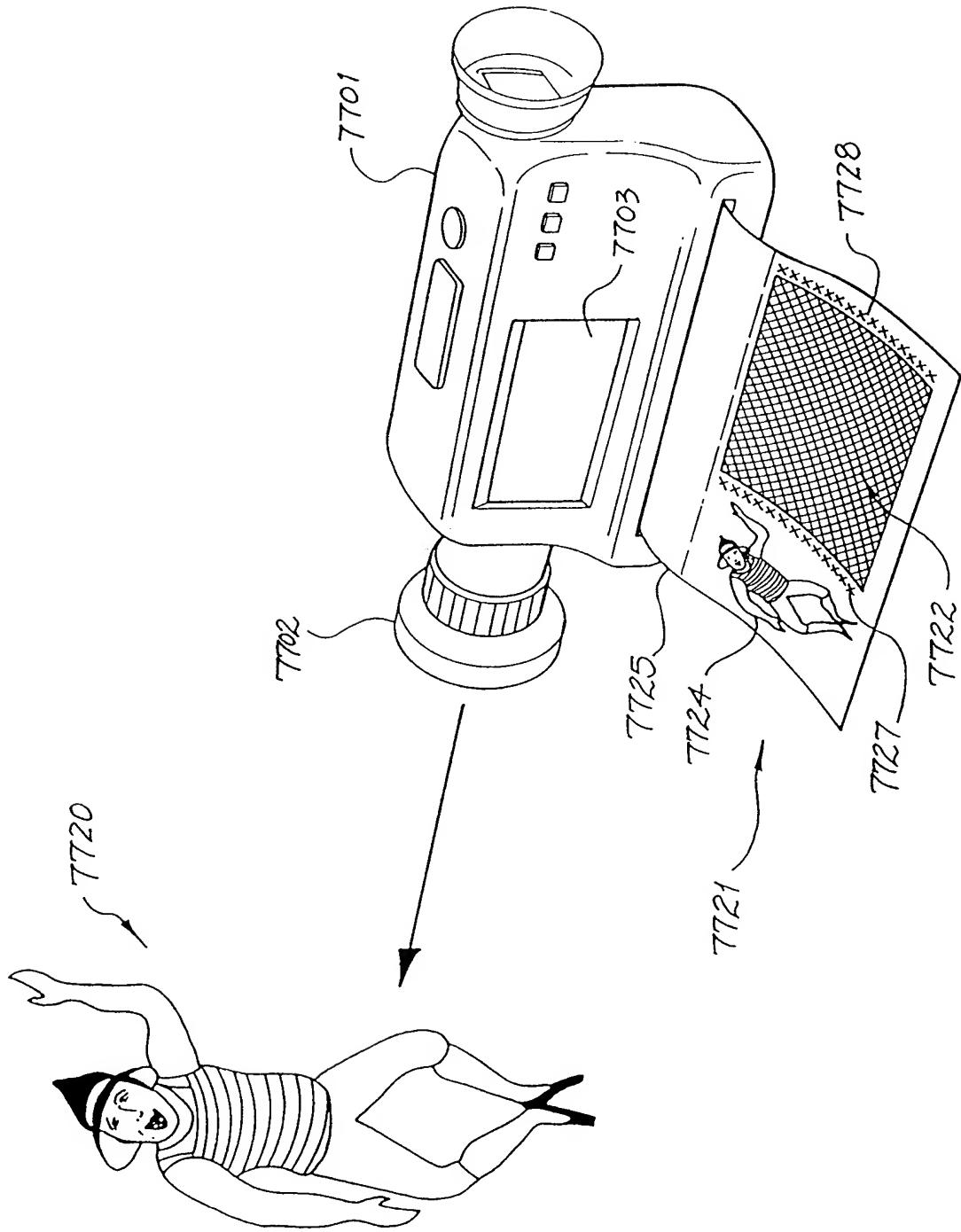


FIG. 342

243 / 246

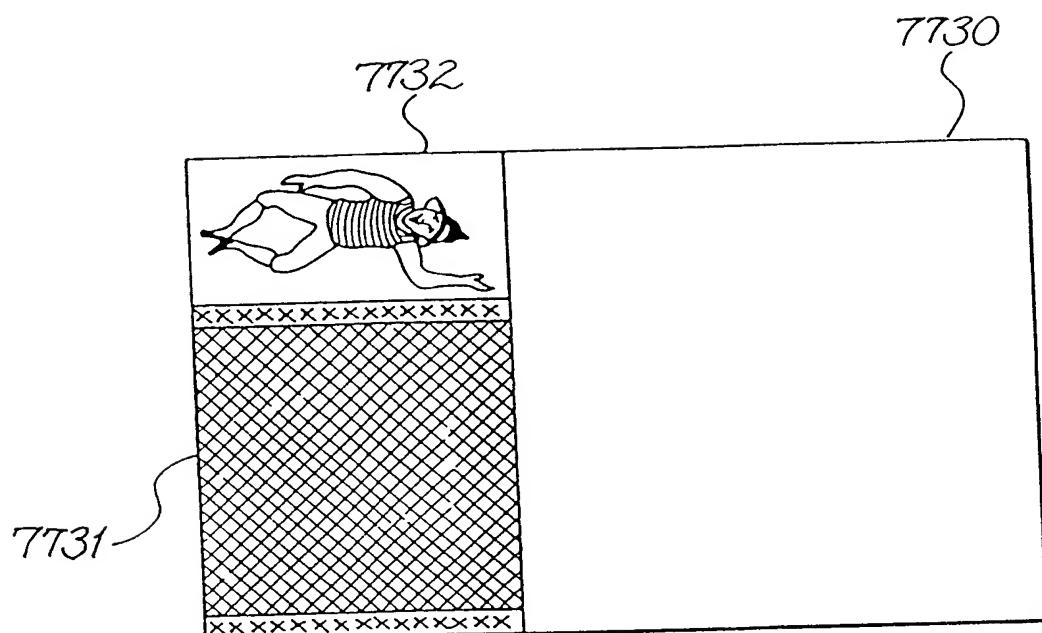


FIG. 343

244 / 246

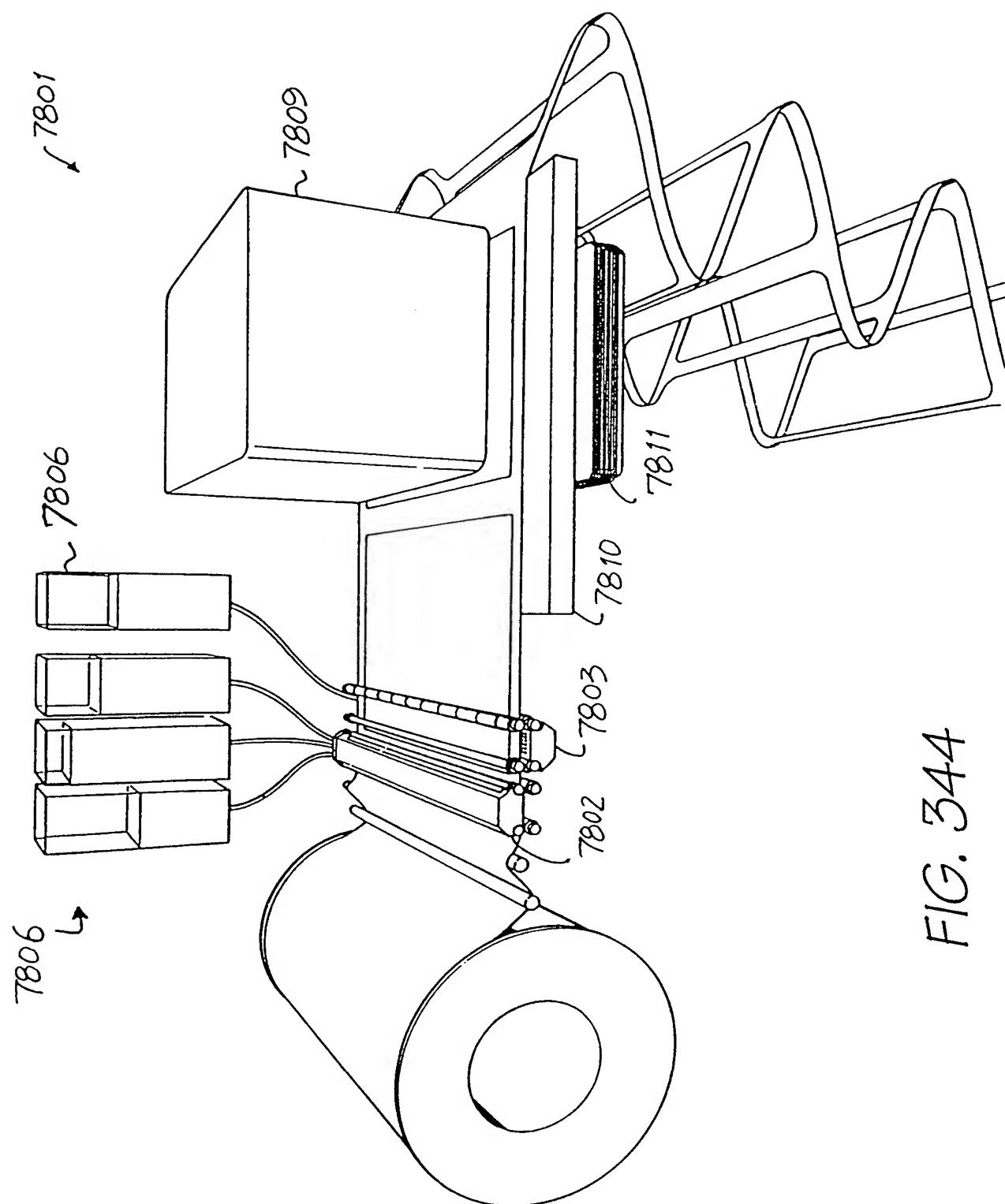


FIG. 344

245 / 246

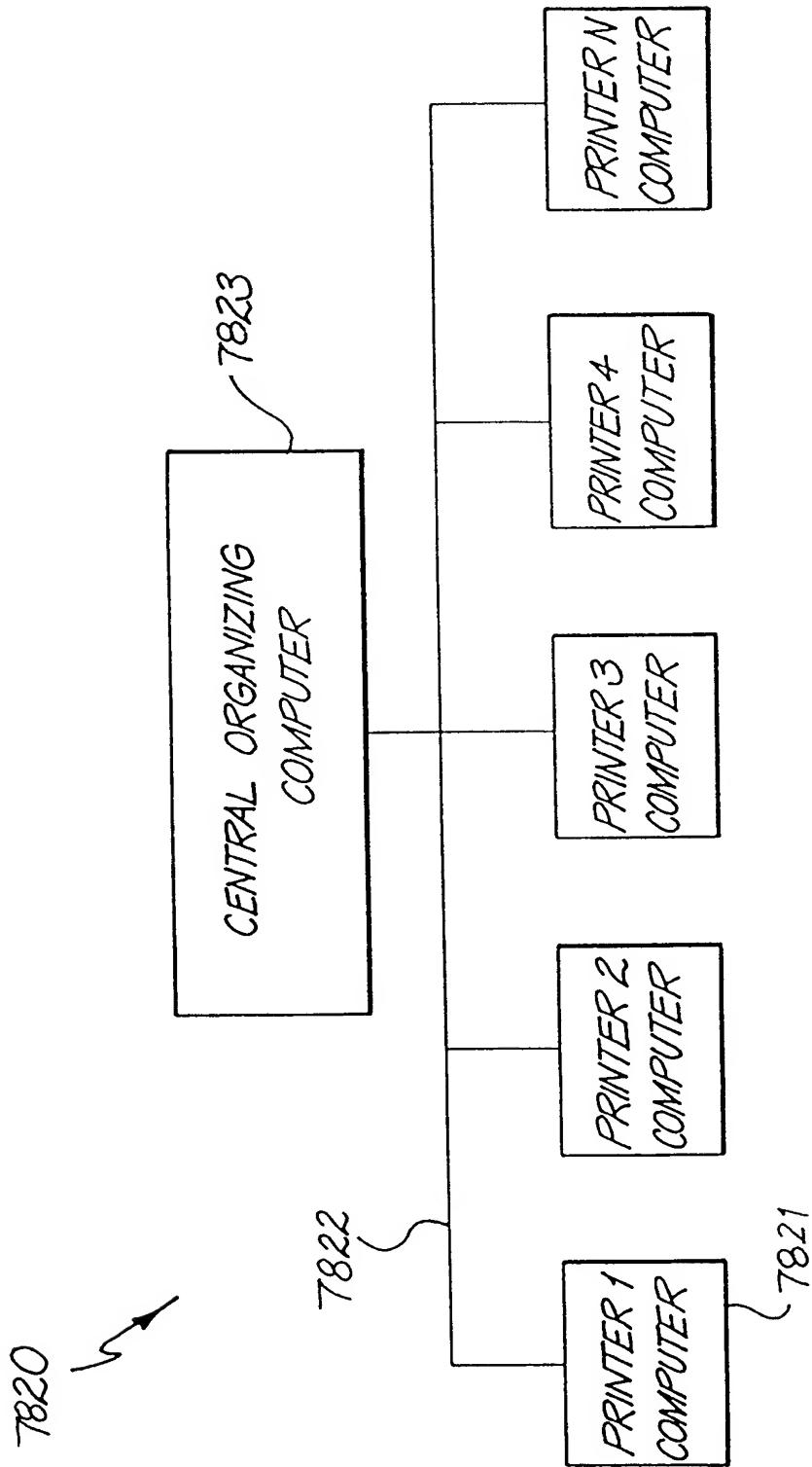
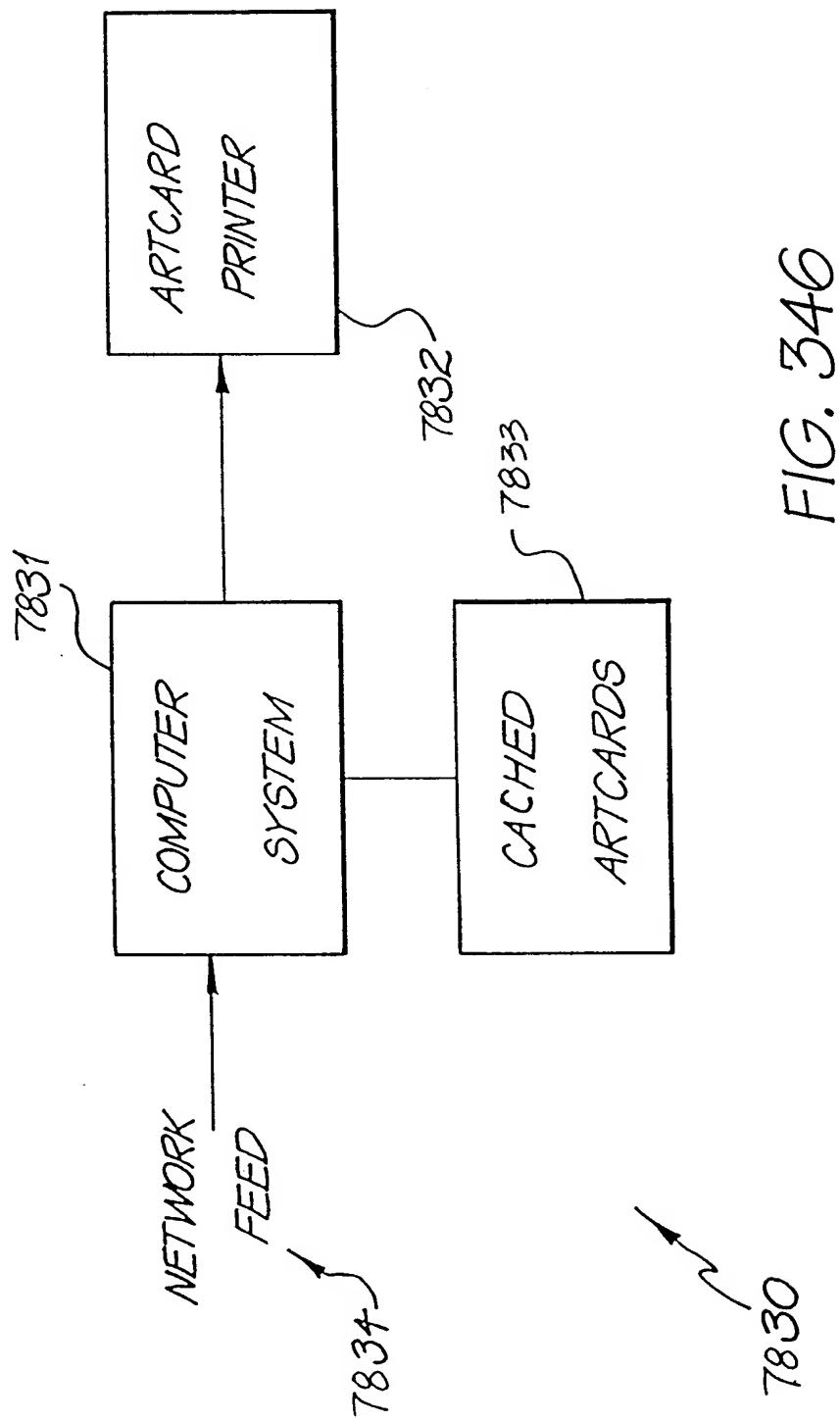


FIG. 345

246 / 246



## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/AU 98/00544

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>																						
Int Cl <sup>6</sup> : G06T-1/00, H04N 101:00, 1/21																						
According to International Patent Classification (IPC) or to both national classification and IPC																						
<b>B. FIELDS SEARCHED</b>																						
Minimum documentation searched (classification system followed by classification symbols) IPC: as above																						
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched																						
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPAT, INSPEC (camera, print:, transform:)																						
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>																						
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																				
Y	EP 763930 (Agfa-Gevaert NV) 19 March 1997 Whole document	1, 12																				
Y	WO 97/06958 (Fisher-Price) 27 February 1997 Whole document	1, 12																				
Y	WO 96/32265 (Eastman Kodak) 17 October 1996 Whole document	1, 12																				
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C		<input checked="" type="checkbox"/> See patent family annex																				
<p>* Special categories of cited documents:</p> <table> <tr> <td>"A"</td> <td>document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T"</td> <td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E"</td> <td>earlier document but published on or after the international filing date</td> <td>"X"</td> <td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L"</td> <td>document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y"</td> <td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O"</td> <td>document referring to an oral disclosure, use, exhibition or other means</td> <td>"&amp;"</td> <td>document member of the same patent family</td> </tr> <tr> <td>"P"</td> <td>document published prior to the international filing date but later than the priority date claimed</td> <td></td> <td></td> </tr> </table>			"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"E"	earlier document but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family	"P"	document published prior to the international filing date but later than the priority date claimed		
"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention																			
"E"	earlier document but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone																			
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art																			
"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family																			
"P"	document published prior to the international filing date but later than the priority date claimed																					
Date of the actual completion of the international search 2 September 1998		Date of mailing of the international search report <b>- 9 SEP 1998</b>																				
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200 WODEN ACT 2606 AUSTRALIA Facsimile No.: (02) 6285 3929		Authorized officer <b>DALE E. SIVER</b> Telephone No.: (02) 6283 2196																				

## INTERNATIONAL SEARCH REPORT

International Application No.  
PCT/AU 98/00544

C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 95/16323 (Fisher-Price) 15 June 1995 Whole document	1, 12
Y	US 5398131 (Hall et al.) 14 March 1995 Whole document	1, 12
Y	US 4937676 (Polaroid) 26 June 1990 Abstract, figures	1, 12

**INTERNATIONAL SEARCH REPORT**International Application No.  
PCT/AU 98/00544**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

**Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

See attached sheets.

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Claims 1 and 12

Camera, image sensor, camera processor, (scene transformation), printer (detachable ink storage)

**Remark on Protest**

- The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

**Supplemental Box**

(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box No: Box II Observations where unity of invention is lacking

Independent Claims

- (a) Claims 1, 12 camera, image sensor, camera processor (scene transformation), printer (detachable ink storage).
- (b) Claims 18, 25 camera, printer, audio signal recorded on media.
- (c) Claims 26, 31 camera, image sensor, orientation sensor, transformed and rotated image.
- (d) Claim 325 processing a digital image depending on focus.
- (e) Claim 39 processing an image from a digital camera using eye position information.
- (f) Claim 45 processing an image from a digital camera using auto exposure information.
- (g) Claims 50, 53 processing an image with flash (distortion) correction.
- (h) Claim 57 stereo photographic image acquisition.
- (i) Claim 58 print media (roll) and ink supply reservoir.
- (j) Claim 73 transparent print media for stereo photographic image.
- (k) Claims 78, 83, 84 a print roll with formatted postcard information.
- (l) Claim 86 a print roll with media, ink and IC storing characteristics of media.
- (m) Claim 97 a print roll with IC for checking if media is "authorised".
- (n) Claims 101, 111 a plane print media with anisotropic stiffness and a method for reducing curl in media.
- (o) Claim 114 a print roll with IC for measuring amount of consumable materials.
- (p) Claim 115 a camera device with different modes associated with different output formats and different number of pictures.
- (q) Claim 119 image processing, filter with brush strokes where high spatial variance.
- (r) Claims 123, 132 image warping based on warp map with scaling.
- (s) Claim 133 method for detecting a region of interest in colour space based on colour seed/difference.
- (t) Claim 134 image conversion - involving tiling.
- (u) Claim 149 creating an output image on canvas using brush strokes from colour palette.
- (v) Claim 155 method of increasing resilience of data recorded on a media (involving a modulating signal).
- (w) Claim 166 converting a scanned image - using centroid measure.
- (x) Claims 167, 173 text editing of image involving data card.
- (y) Claim 179 a portable camera with scripting language.
- (z) Claim 183 an image copying device.
- (aa) Claim 185 deblurring an image involving motion detection and compensation.
- (bb) Claim 190 a photosensor reader preform, light emitters and photosensors controlling focus onto CCD.
- (cc) Claim 197 computer printer with inkjet printer and print roll.
- (dd) Claim 201 digital camera with sensing means for image and output means, all arranged around a central crossbar.
- (ee) Claims 225, 227 sub-sampling image pixels based on expected location of dot (pattern).
- (ff) Claim 233 image processing - bump map combining.
- (gg) Claims 238, 242 image processing - output gamut.
- (hh) Claims 244, 253 tiled image output from handheld camera.
- (ii) Claims 256, 260 texture mapping in handheld camera.
- (jj) Claims 263, 271 lighting effects (processing) in handheld camera.
- (kk) Claim 274 a garment creation system and garment fabric printer.
- (ll) Claim 284 a camera system with multiple mainipulation units.
- (mm) Claim 289 portable imaging system with printer.

continued

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**International Application No.  
PCT/ AU 98/00544**Supplemental Box**

(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box No: Box II Observations where unity of invention is lacking

- (nn) Claims 297, 302 a system for playing pre-recorded audio.
- (oo) Claims 305, 328 printed card information based on area to area features.
- (pp) Claim 320 instructions for image manipulation involving iterative sampling.
- (qq) Claim 7 user interface with card.
- (rr) Claims 334, 338 digital camera with image modification data modules and image processing.
- (ss) Claim 345 camera with magnetic sensitive surface and print media.
- (tt) Claim 350 fault tolerant printing of encoded image.
- (uu) Claim 357 distribution and printing of image manipulation data cards in a computer network.
- (vv) Claims 361, 369 data structure - encoding, with clock marks.
- (ww) Claim 372 quantising sensed data - three regions.
- (xx) Claim 379 fluid supply means.
- (yy) Claim 387 printer mechanism for printing images with cartridge.
- (zz) Claims 393, 399, 402, 405, 406 providing for resistance to monitoring or tampering, also an authentication unit (ie. security systems for consumables).

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International Application No.  
**PCT/AU 98/00544**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member		
EP	763930	JP	9139852			
WO	9706958	AU	66831/96	EP	846062	
WO	9632265	AU	2293/95	EP	765226	AU 2296/95
WO	9516323	AU	12985/95	CA	2190781	GB 9325076
		GB	9610278	GB	2298333	GB 9804840
		GB	2320158	US	5748326	
US	5398131	EP	788618	JP	10506205	WO 9610208
US	4937676	CA	2007744	DE	69014924	EP 382044
		JP	2261270			
END OF ANNEX						